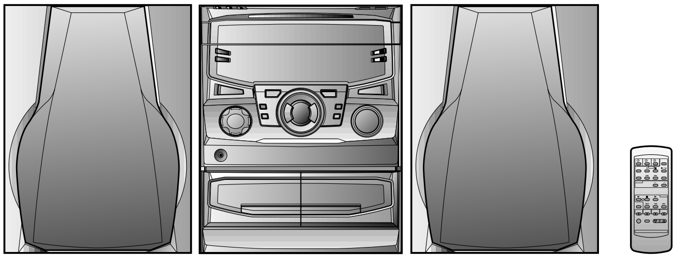
SHARP SERVICE MANUAL

No. S4917CDC662//



CD-C662

CD-C662 mini component system consisting of CD-C662 (Main unit) and CP-C662 and (Speaker system).

COMPACT disc DIGITAL AUDIO

• In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.

CONTENTS

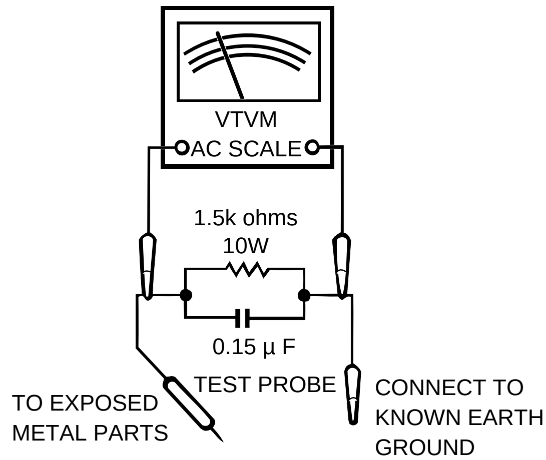
FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

IMPORTANT SERVICE NOTES (FOR U.S.A. ONLY)

BEFORE RETURNING THE AUDIO PRODUCT
(Fire & Shock Hazard)
Before returning the audio product to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the audio product.
2. Inspect all protective devices such as insulating materials, cabinet, terminal board, adjustment and compartment covers or shields, mechanical insulators etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.

* Plug the AC line cord directly into a 120 volt AC outlet.
* Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15µF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as conduit or electrical ground connected to earth ground.
* Use a VTVM or VOM with 1000 ohm per volt, or higher, sensitivity to measure the AC voltage drop across the resistor (See diagram).
* Connect the resistor connection to all exposed metal parts having a return path to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.



All check must be repeated with the AC line cord plug connection reversed.
Any reading of 0.3 volt RMS (this corresponds to 0.2 milliamp. AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the audio product to the owner.

SPECIFICATIONS

CD-C662

General

Power source:	AC 120 V, 60 Hz
Power consumption:	Stand-by; 0.3 W Power on; 210 W
Dimensions:	Width; 10-5/8" (270 mm) Height; 13" (330 mm) Depth; 14-1/8" (358 mm)
Weight:	22.0 lbs. (10.0 kg)

Amplifier section

Output power:	150 watts minimum RMS per channel into 6 ohms from 60 Hz to 20 kHz, 10 % total harmonic distortion
Output terminals:	Speakers; 6 ohms Headphones; 16-50 ohms (recommended; 32 ohms) CD digital output (optical)
Input terminal:	Video/Auxiliary (audio signal); 500 mV/47 kohms

Tuner section

Frequency range:	FM; 87.5 - 108 MHz AM; 530 - 1,720 kHz

Cassette deck section

Frequency response:	50 - 14,000 Hz (Normal tape)
Signal/noise ratio:	55 dB (TAPE 1, playback) 50 dB (TAPE 2, recording/ playback)
Wow and flutter:	0.15 % (WRMS)

Compact disc player section

Type:	3-disc multi-play compact disc player
Signal readout:	Non-contact, 3-beam semi-conductor laser pickup
D/A Converter:	1-bit D/A converter
Frequency response:	20 - 20,000 Hz
Dynamic range:	90 dB (1 kHz)

CP-C662

Speaker section

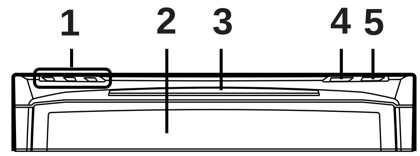
Type:	2-way type [7-7/8" (200 mm) woofer and 3-1/8" (80 mm) tweeter]
Maximum input power:	300 W
Rated input power:	150 W
Impedance:	6 ohms
Dimensions:	Width; 9-13/16" (250 mm) Height; 13" (330 mm) Depth; 13-1/14" (335 mm)
Weight:	13.4 lbs. (6.1 kg)/each

Specifications for this model are subject to change without prior notice.

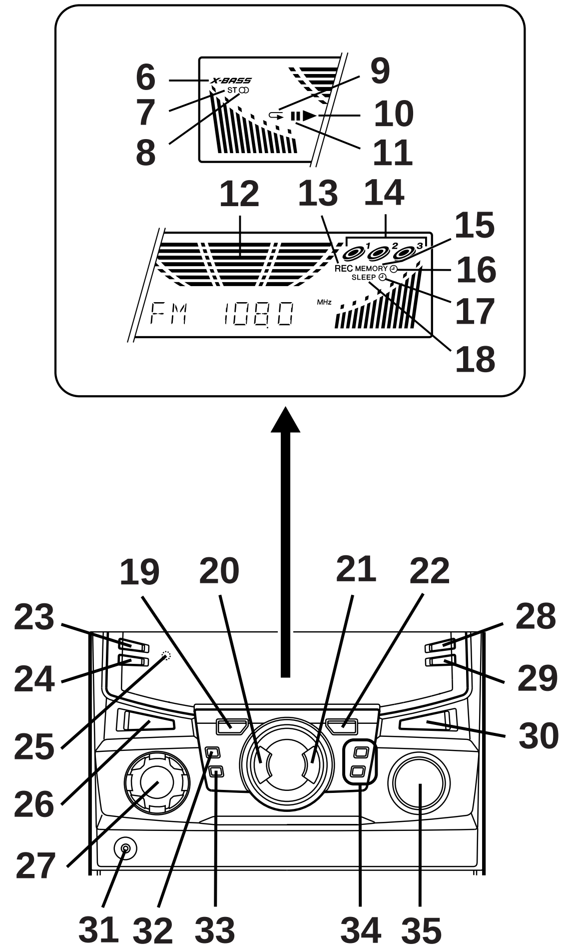
NAMES OF PARTS

CD-C662

■ **Front Panel**

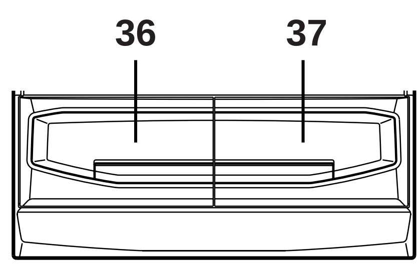


1. Disc Number Selector Buttons
2. Disc Tray
3. Multi Indicator
4. Disc Skip Button
5. Open/Close Button



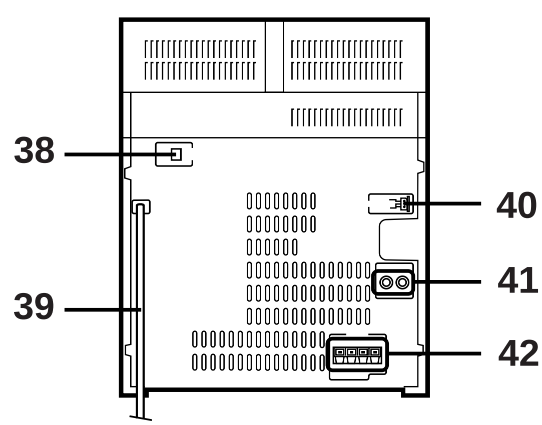
6. Extra Bass Indicator
7. FM Stereo Mode Indicator
8. FM Stereo Indicator
9. (CD) Repeat Indicator
10. (CD) Play Indicator
11. (CD) Pause Indicator
12. Spectrum Analyzer/Volume Level Indicator
13. (TAPE 2) Record Indicator
14. (CD) Disc Number Indicators
15. (CD/TUNER) Memory Indicator
16. Timer Play Indicator
17. Timer Record Indicator
18. Sleep Indicator

19. (CD) Track Down/Review Button
    (TUNER) Preset Down Button
    (TAPE 2) Rewind Button
20. (CD/TAPE) Stop Button
21. (TAPE) Play Button
    (CD) Play/Repeat Button
22. (CD) Track Up/Cue Button
    (TUNER) Preset Up Button
    (TAPE 2) Fast Forward Button
23. Timer/Sleep Button
24. Clock Button
25. Timer Set Indicator
26. Power Button
27. Function Selector Buttons
28. Equalizer Mode Selector Button
29. Dimmer Button
30. Extra Bass/Demo Mode Button
31. Headphones Socket
32. (TAPE 2) Record Pause Button
33. Memory/Set Button
34. Tuning and Time Up/Cue Buttons
35. Volume Control



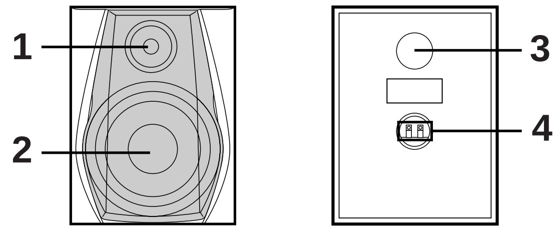
36. (TAPE 1) Cassette Compartment
37. (TAPE 2) Cassette Compartment

■ **Rear Panel**



38. CD Digital Output Socket
39. AC power lead
40. FM/AM Loop Aerial Socket
41. Video/Auxiliary (Audio Signal) Input Sockets
42. Speaker Terminals

CP-C662

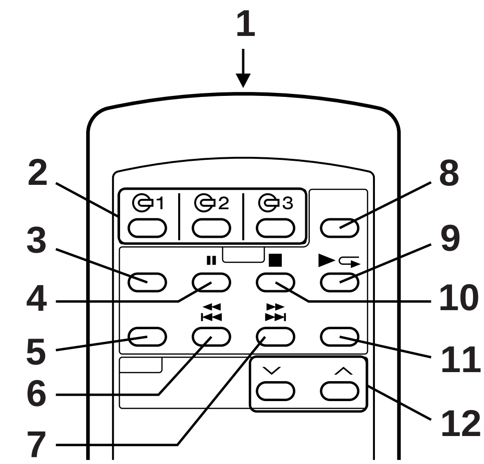


■ Front Speaker

1. Tweeter
2. Woofer
3. Bass Reflex Ducts
4. Speaker Terminals

■ Remote Control

1. Remote Control Transmitter LED

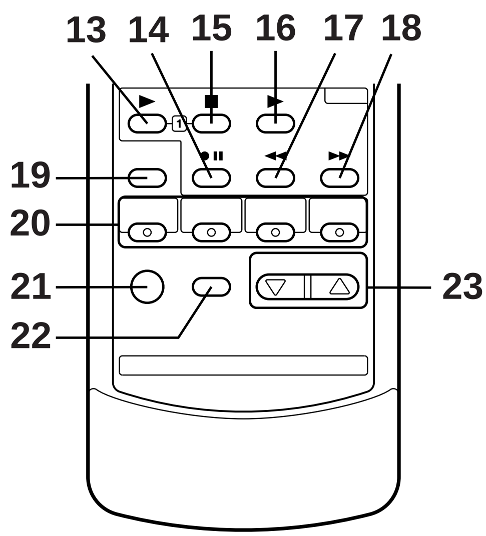


● CD Control section

2. Disc Number Select Buttons
3. Memory Button
4. Pause Button
5. Clear Button
6. Track Down/Review Button
7. Track Up/Cue Button
8. Disc Skip Button
9. Play/Repeat Button
10. Stop Button
11. Random Button

● Tuner control section

12. Preset Up/Down Buttons



● Tape control section

13. (TAPE 1) Play Button
14. (TAPE 2) Record Pause Button
15. (TAPE 1/2) Stop Button
16. (TAPE 2) Play Button
17. (TAPE 2) Rewind Button
18. (TAPE 2) Fast Forward Button

● Common section

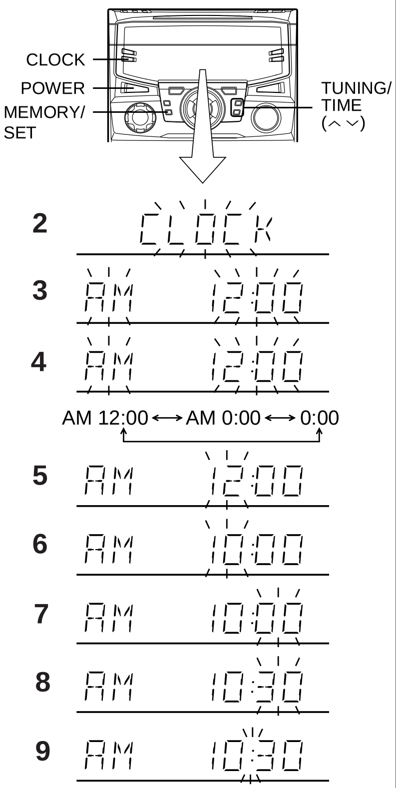
19. Equalizer Mode Selector Button
20. Function Selector Buttons
21. Power Button
22. Extra Bass Button
23. Volume Up/Down Buttons

OPERATION MANUAL

SETTING THE CLOCK

(Main unit operation)

In this example, the clock is set for the 12-hour (AM 12:00) system.



1 Press the POWER button to enter the stand-by mode.

2 Press the CLOCK button.

3 Within 5 seconds, press the MEMORY/SET button.

4 Press the TUNING/TIME (⌃ or ⌄) button to select the time display mode.

"AM 12:00" → The 12-hour display will appear. (AM 12:00 - PM 11:59)
"AM 0:00" → The 12-hour display will appear. (AM 0:00 - PM 11:59)
"0:00" → The 24-hour display will appear. (0:00 - 23:59)

● Note that this can only be set when the unit is first installed or it has been reset.

5 Press the MEMORY/SET button.

6 Press the TUNING/TIME (⌃ or ⌄) button to adjust the hour.

● Press the TUNING/TIME (⌃ or ⌄) button once to advance the time by 1 hour. Hold it down to advance continuously.
● When the 12-hour display is selected, "AM" will change automatically to "PM".

7 Press the MEMORY/SET button.

8 Press the TUNING/TIME (⌃ or ⌄) button to adjust the minutes.

● Press the TUNING/TIME (⌃ or ⌄) button once to advance the time by 1 minute. Hold it down to change the time in 5 minute intervals.
● The hour setting will not advance even if minutes advance from "59" to "00".

9 Press the MEMORY/SET button.

● The clock starts operating from "0" seconds. (Seconds are not displayed.)

Note:
● In the event of a power failure or when the AC power cord is disconnected, the clock display will go out.
When the AC power supply is restored, the clock display will flash on and off to indicate the time when the power failure occurred or when the AC power cord was disconnected.
If this happens, follow the procedure below to change the clock time.

To change the clock time:

① Press the CLOCK button.

② Within 5 seconds, press the MEMORY/SET button.

③ Perform steps 6 - 9 above.

To see the time display:

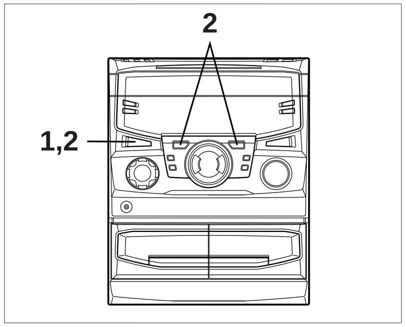
Press the CLOCK button.
● The time display will appear for about 5 seconds.

To change the time display mode:

① Perform steps 1 - 2 in the section "RESETTING THE MICROCOMPUTER", on page 15.

② Perform steps 1 - 9 above.

RESETTING THE MICROCOMPUTER



Reset the microcomputer under the following conditions:
● To erase all of the stored memory contents (clock and timer settings, and tuner and CD presets).
● If the display is not correct.
● If the operation is not correct.

1 Press the POWER button to enter the stand-by mode.

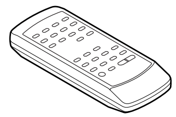
2 While pressing down the ⏮/◀◀ button and the ▶▶/⏭ button, hold down the POWER button for at least 1 second.

Caution:
● The operation explained above will erase all data stored in memory including clock and timer settings, and tuner and CD presets.

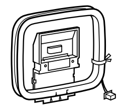
SHARP

MINI COMPONENT SYSTEM
Quick Guide/Guía rápida CD-C662

1 Check the supplied accessories / *Compruebe los accesorios suministrados*



- **Remote control x 1**
- ***Controlador remoto x 1***



- **FM/AM loop antenna x 1**
- ***Antena de cuadro de FM/AM x 1***

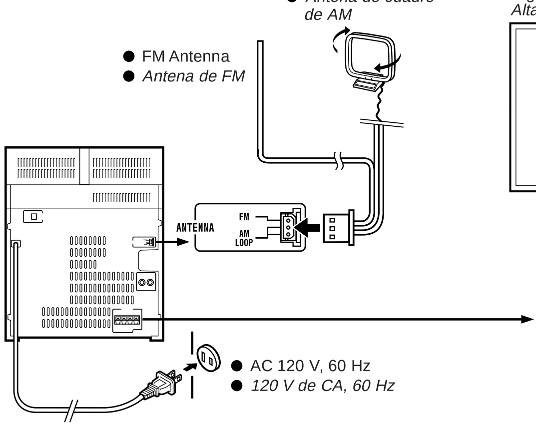


- **Speaker wire x 2**
- ***Cable de altavoz x 2***

2 Preparation for use / *Preparación para su uso*

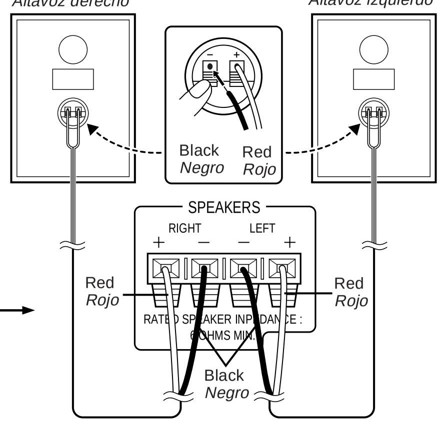
■ **Antenna connection**
■ ***Conexión de las antenas***

- AM Loop Antenna
- *Antena de cuadro de AM*
- FM Antenna
- *Antena de FM*

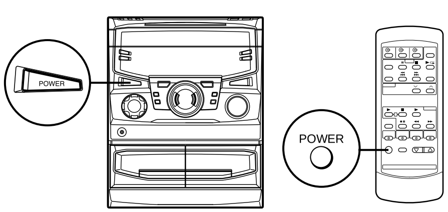


- AC 120 V, 60 Hz
- *120 V de CA, 60 Hz*

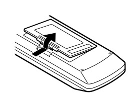
■ **Speaker connection**
■ ***Conexión de los altavoces***



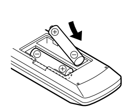
■ **Turning the power on and off**
■ ***Conexión y desconexión de la alimentación***



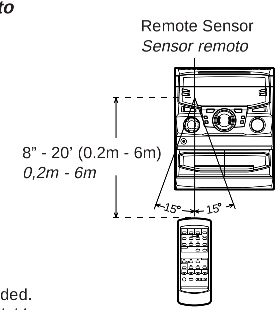
■ **Remote control**
■ ***Controlador remoto***



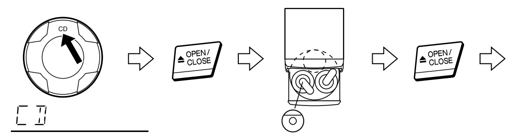
- 2 "AA" batteries
- *Dos pilas "AA"*



- Batteries are not included.
- *Las pilas no están incluidas.*

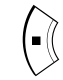


3 Listening to a CD / *Audición de discos CD*

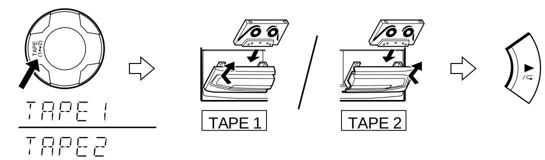


- Label facing up
- *Etiqueta hacia arriba*

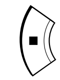
■ **To stop the playback**
■ ***Para detener la reproducción***



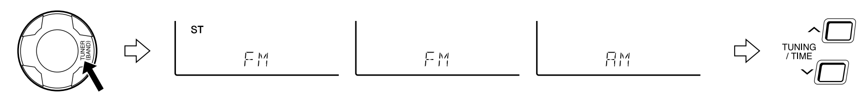
4 Listening to a tape / *Audición de una cinta*



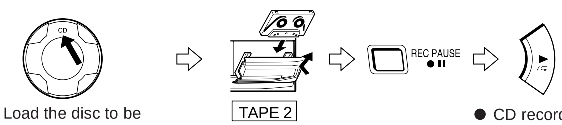
■ **To stop the playback**
■ ***Para detener la reproducción***



5 Listening to the radio / *Audición de la radio*

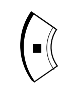


6 Recording from CDs / *Grabaciones de discos CD*



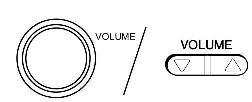
- Load the disc to be recorded.
- *Introduzca el disco que va a grabar.*
- CD recording starts.
- *La grabación de CD empieza.*

■ **To stop the recording**
■ ***Para detener la grabación***

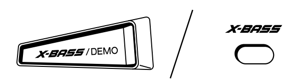


7 Sound control / *Control del sonido*

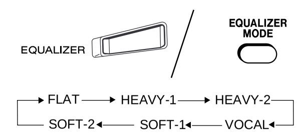
■ **Volume**
■ ***Volumen***



■ **Extra bass (X-BASS)**
■ ***Graves extra (X-BASS)***



■ **Pre-programmed equalizer**
■ ***Ecualizador preprogramado***



DISASSEMBLY

Caution on Disassembly
Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:
1. Take cassette tape and compact disc out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

CD-C662

STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw .... (A1) x4	7-1
2	Side Panel (Left/right)	1. Screw .... (B1) x8	7-1
3	CD Player Unit/ CD Tray Cover	1. Turn on the power supply, open the disc tray, take out the CD cover, and close. (Note 1) 2. Screw .... (C1) x1 3. Hook .... (C2) x3 4. Hook .... (C3) x2 5. Socket .... (C4) x3	7-2
4	Rear Panel (with Digital Output PWB)	1. Screw .... (D1) x5	7-2
5	Main PWB	1. Screw .... (E1) x1 2. Socket .... (E2) x4 3. Flat Cable .... (E3) x1	8-1
6	Front Panel	1. Screw .... (F1) x3 2. Socket .... (F2) x1	8-1
7	Power Amp. PWB	1. Screw .... (G1) x7 2. Socket .... (G2) x2 3. PWB Holder .... (G3) x1	8-2
8	Power Supply PWB	1. Screw .... (H1) x4	8-2
9	Display PWB/ Switch PWB	1. Screw .... (J1) x13 2. Socket .... (J2) x1	8-3
10	Tape Mechanism	1. Open the cassette holder. 2. Screw...................... (K1) x6	8-3
11	Turntable	1. Screw .... (L1) x1 2. Cover .... (L2) x1	8-4
12	Disc Tray	1. Screw .... (M1) x2 2. Guide .... (M2) x2	8-4
13	CD Servo PWB (Note 2)	1. Screw .... (N1) x1 2. Socket .... (N2) x4	8-5
14	CD Changer Mechanism	1. Screw .... (P1) x4	8-6
15	CD Mechanism	1. Screw .... (Q1) x1	8-6

Note 1:
How to open the changer manually. (Fig. 7-3)
1. Change, turn fully the lock lever in the arrow direction through the hole on the loading chassis bottom in this state. After that, push forward the CD player base.

Note 2:
1. After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of connector to protect the optical pickup from electrostatic damage.

CD-C662

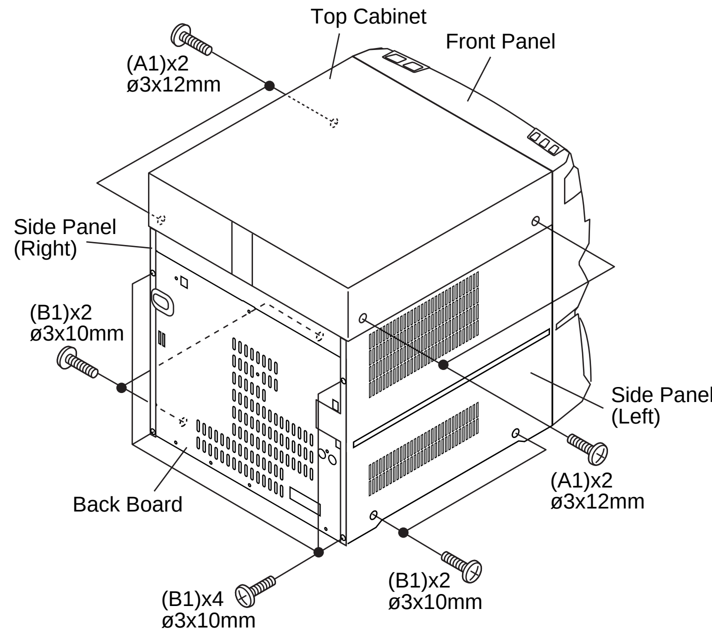


Figure 7-1

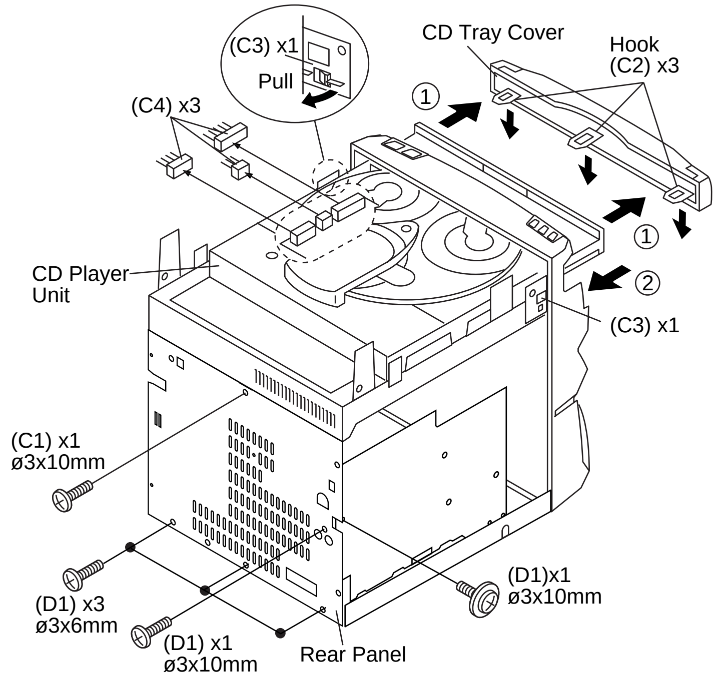


Figure 7-2

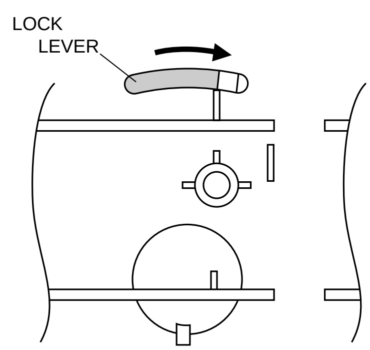


Figure 7-3

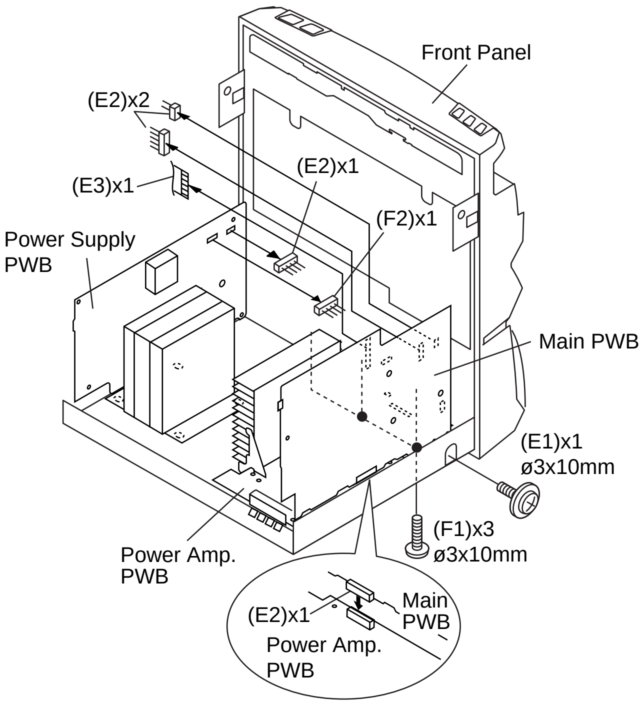


Figure 8-1

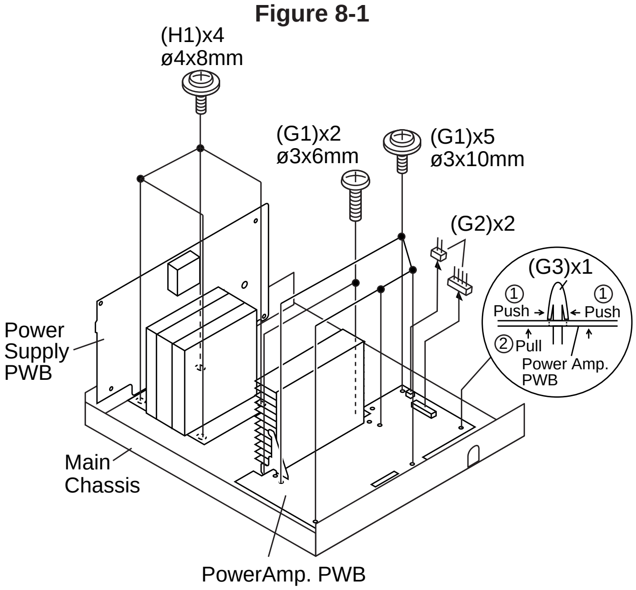


Figure 8-2

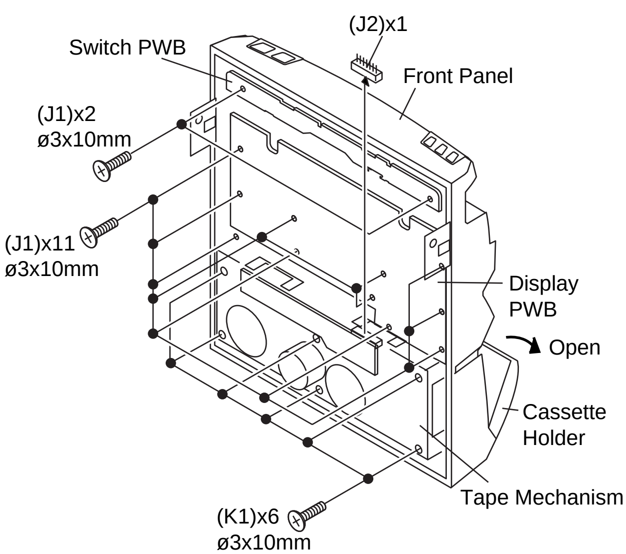


Figure 8-3

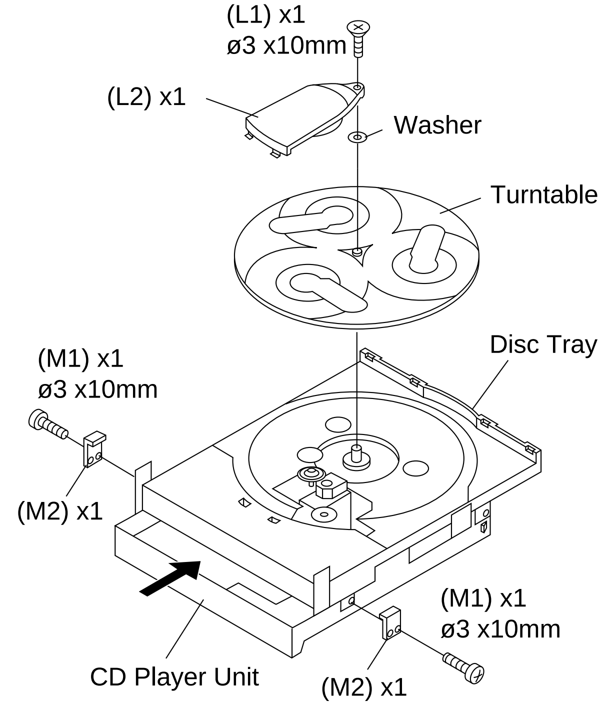


Figure 8-4

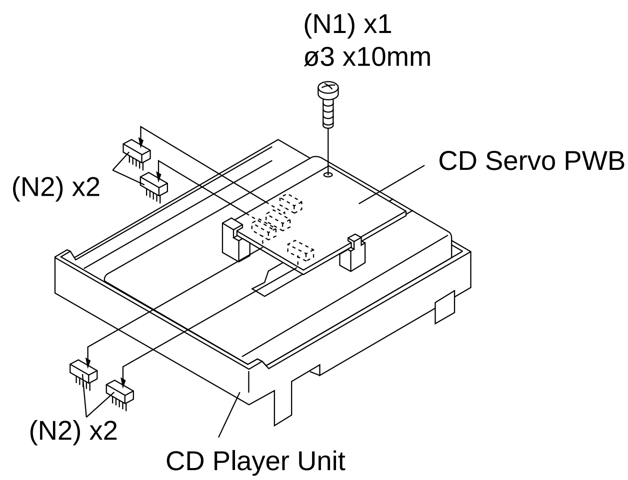
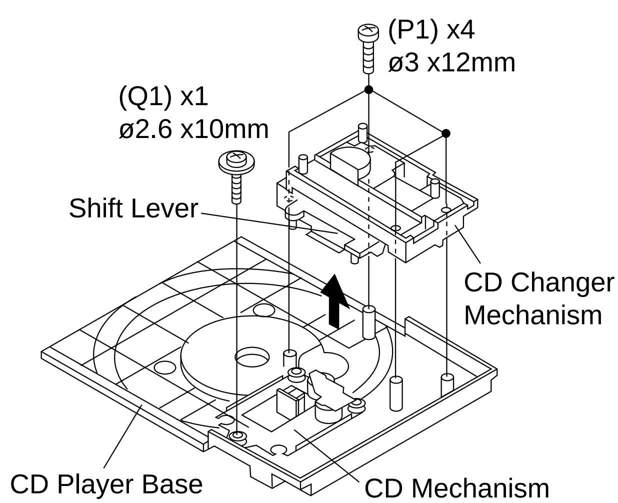


Figure 8-5



Be careful when installing the CD changer mechanism. Install the CD changer mechanism on the CD player base after the shift lever has been set in the highest position.

Figure 8-6

CP-C662

STEP	REMOVAL	PROCEDURE	FIGURE
1	Front Panel	1. Net .... (A1) x1 2. Rubber .... (A2) x4 3. Screw .... (A3) x4 4. Tip .... (A4) x2	9-1 9-2
2	Woofer	1. Screw .... (B1) x4	9-2
3	Tweeter	1. Screw .... (C1) x4	9-2

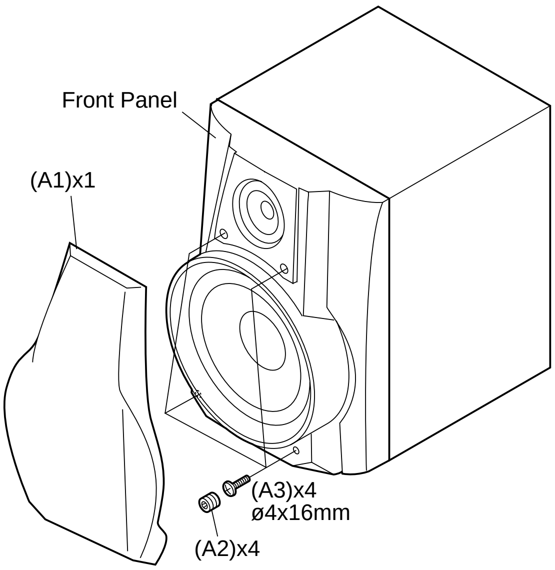


Figure 9-1

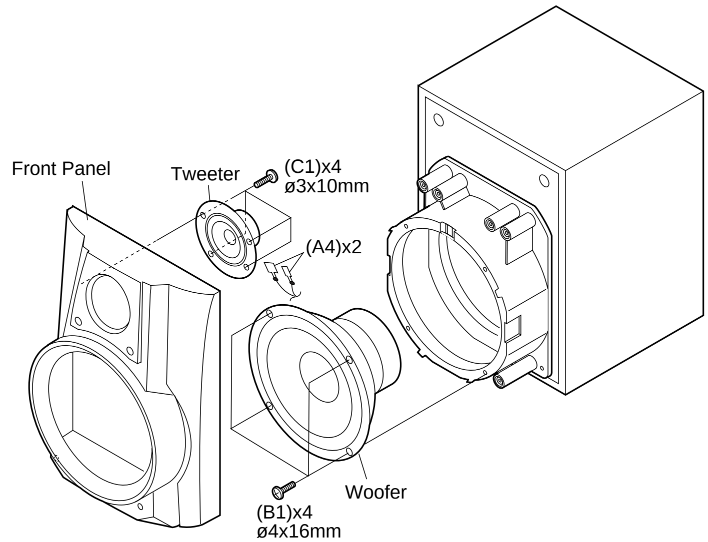


Figure 9-2

REMOVING AND REINSTALLING THE MAIN PARTS

CD MECHANISM SECTION

Perform steps 1, 2, 3, 11, 12, 13, 14 and 15 of the disassembly method to remove the CD mechanism.

How to remove the loading motor (See Fig. 10-1)

1. Remove the screws (A1) x 2 pcs., to remove the loading motor.

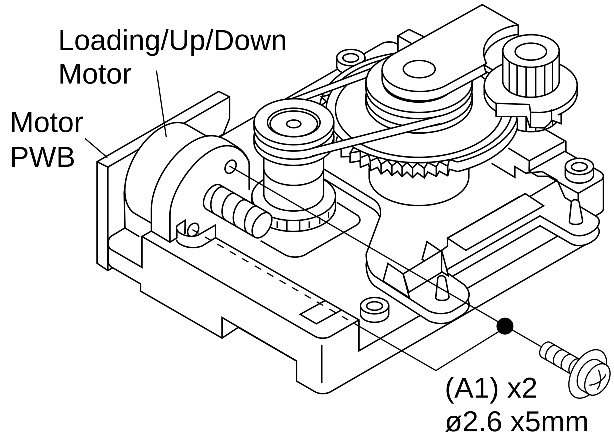


Figure 10-1

How to remove the pickup (See Fig. 10-2)

1. Remove the screws (B1) x 2 pcs., to remove the shaft (B2).
2. Remove the stop washer (B3) x 1 pc., to remove the gear (B4).
3. Remove the pickup.

Note

After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of connector to protect the optical pickup from electrostatic damage.

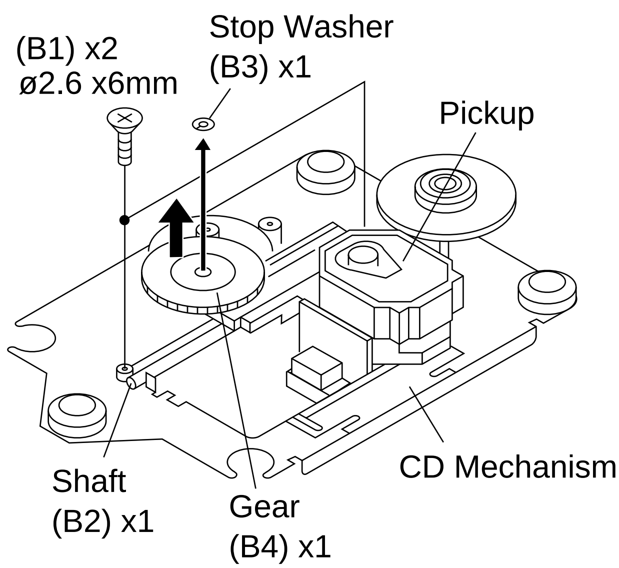


Figure 10-2

ADJUSTMENT

MECHANISM SECTION

• **Driving Force Check**

Torque Meter	Specified Value
Play: TW-2412	Tape 1: Over 80 g Tape 2: Over 80 g

• **Torque Check**

Torque Meter	Specified Value	
	Tape 1	Tape 2
Play: TW-2111	30 to 60 g. cm	30 to 60 g.cm
Fast forward: TW-2231	—	60 to 120 g.cm
Rewind: TW-2231	—	60 to 120 g.cm

• **Tape Speed**

	Test Tape	Adjusting Point	Specified Value	Instrument Connection
Normal speed	MTT-111	Volume in motor. (MM1)	3,000 ± 30 Hz	Speaker terminal (Load resistance: 8 ohms)

TAPE MECHANISM

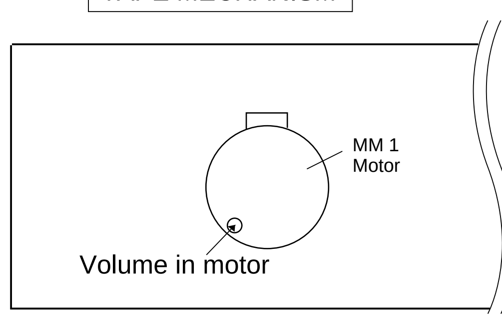


Figure 10-3

TUNER SECTION

fL: Low-range frequency
fH: High-renge frequency

- **AM IF/RF**

Signal generator: 400 Hz, 30%, AM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Parts	Instrument Connection
IF	450 kHz	1,720 kHz	T351	*1
Band Coverage	—	530 kHz	(fL): T333 1.1 ± 0.1 V	*2
Tracking	990 kHz	990 kHz	(fL): T331	*1

*1. Input: Antenna, Output: TP302
*2. Input: Antenna, Output: TP301

- **FM RF**

Signal generator: 1 kHz, 75 kHz dev., FM modulated

Test Stage	Frequency	Frequency Display	Serring/ Adjusting Point	Instrument Connection
Band Coverage	—	87.50 MHz	L303(fL): 3.4 V ± 50 mV	*1
RF	98.00 MHz (10-30 dB)	98.00 MHz	L302	*2

*1. Input: Antenna, Output: TP301
*2. Input: Antenna, Output: Speaker terminal

- **Detection**

Signal generator: 10.7 MHz, FM sweep generator

Test Stage	Frequency	Frequency Display	Adjusting Parts	Instrument Connection
Detection	10.7 MHz	98.00 MHz	T352	Input: Pin 1 of IC303 Output: TP302
IF	10.7 MHz	98.00 MHz	T301(Turn the core of transformer T352 fully counter-clookwise.)	Input: Pin 1 of IC301 Output: TP302

- **VCO Frequency**

Frequency	Frequency Display	Adjusting Parts	Instrument Connection
98.00 MHz (60 dB)	98.00 MHz	VR351*	Pin 13, Pin 21 and ground of IC303

* Adjust for 76 kHz ± 200 Hz.

Notes:

After preparing the test circuit shown in Fig 11-2, connect the Pin 13 , Pin 21 and ground of the IC303 with test circuit, and measure the Value.
At this time, apply a standard unmodulated signal input and adjust the VCO.

CD ERROR CODE DESCRIPTION

When a malfunction occurs during CD operation, an error code will be displayed to identify the function in CD operation which failed.

Error	State Code
0001	Cannot detect puin SW
0101	Tray close operation error
0105	Tray close operation error
0201	Tray open operation error
0203	Tray open operation error
0304	Disc skip operation error
0305	Disc skip operation error
0307	Disc skip operation error

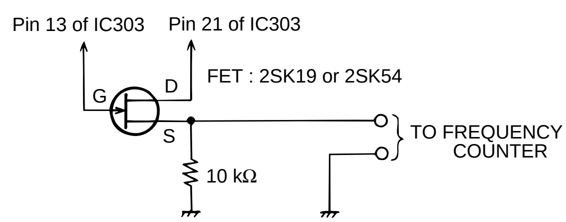


Figure 11-2

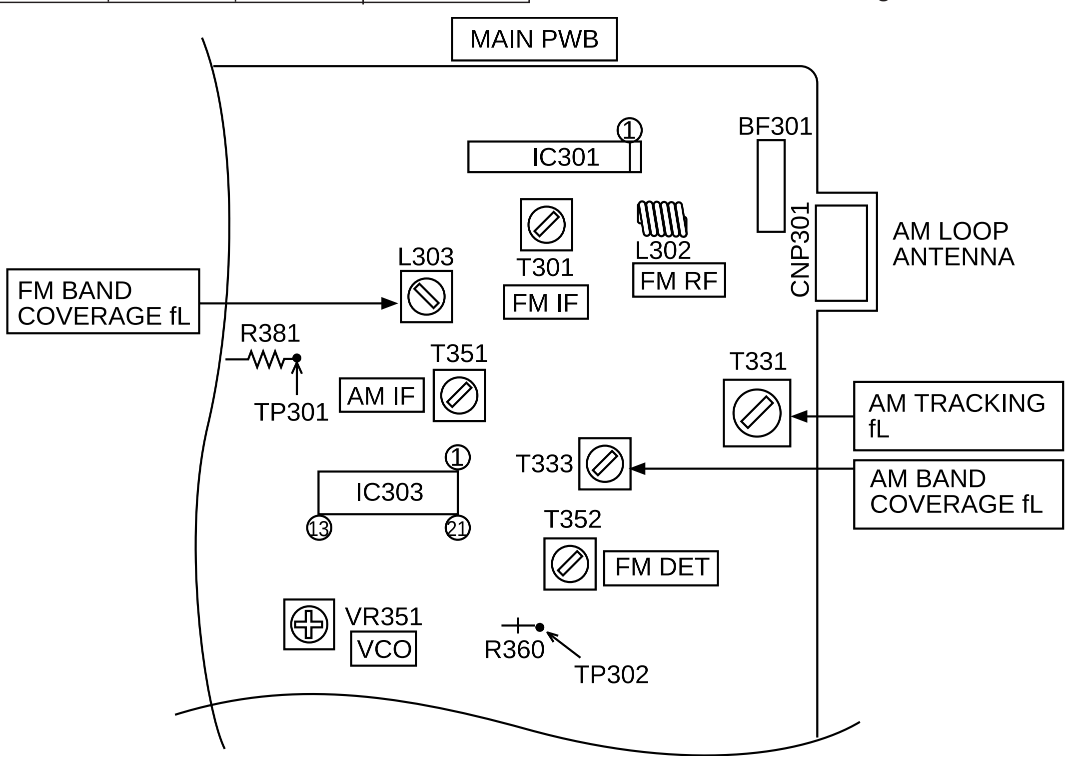


Figure 11-1 ADJUSTMENT POINTS

TEST MODE

• Setting the test mode

Any one of test mode can be set by pressing several keys as follows.

<REC. PAUSE> + <DISC. SKIP> + <POWER> TEST: CD operation test

• TEST mode

Function — CD test mode

Setting of TEST mode
|
Indication of CD TST mode (Fig. 12-1)
|
OPEN/CLOSE operation is manual operation.
|
The pickup can be moved by using the (▶▶) or (◀◀) key.

(The four steps above: IL is not performed.)

- <MEMORY> LASER ON — <MEMORY> Tracking on the spot. SERVO OFF PLAY — <MEMORY> Tracking on the spot. SERVO ON PLAY — <STOP> STOP
- <PLAY> key input — TOC. IL is performed, and the ordinary PLAY is performed. — Press <STOP> key. — Stop
  If the following key is pressed during PLAY, it is possible to specify directly any Track No.
  <Disc Number 1> key: Track 4
  <Disc Number 2> key: Track 9
  <Disc Number 3> key: Track 15

Note:

Only in STOP state it is possible to slide the pickup with the (▶▶) or (◀◀) key.

VOL. --- Last memory
BAL. --- CENTER
R.GEQ. --- FLAT
X-BAS --- OFF

Canceling method - POWER OFF

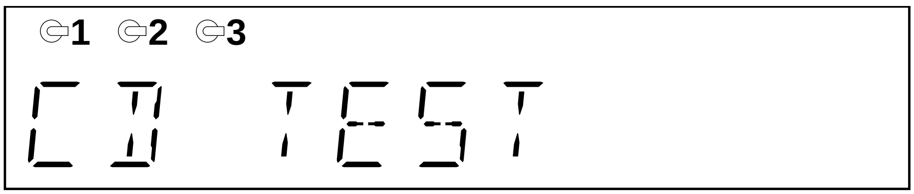


Figure 12-1

CD SECTION

Since this CD system incorporates the following automatic adjustment function, when the pickup is replaced, it is not necessary to readjust it.

Since this CD unit does not need adjustment, the combination of PWB and laser pickup unit is not restricted.

• Automatic adjustment item

1. Focus offset (Fig. 12-2)
2. Tracking offset (Fig. 12-3)
3. E/F balance (tracking error balance) (Fig. 12-4)
4. RF level AGC function (HF level: constant)
5. RF level automatic follow-up of the tracking gain

This automatic adjustment is performed each time a disc is changed. Therefore, each disc is played back using the optimal settings.

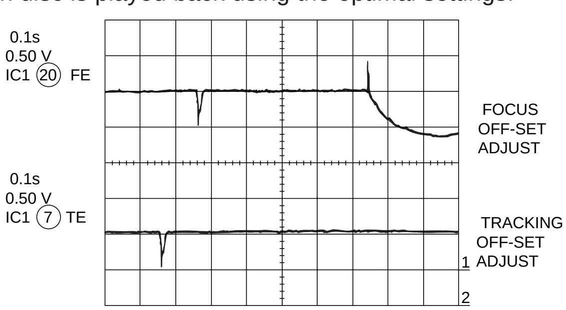


Figure 12-2

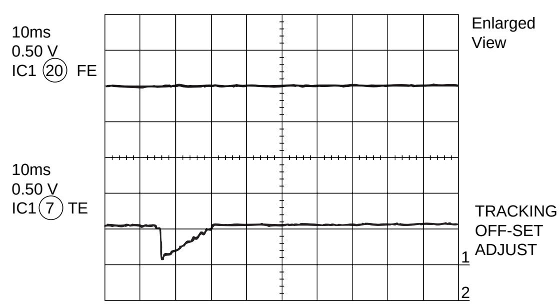


Figure 12-3

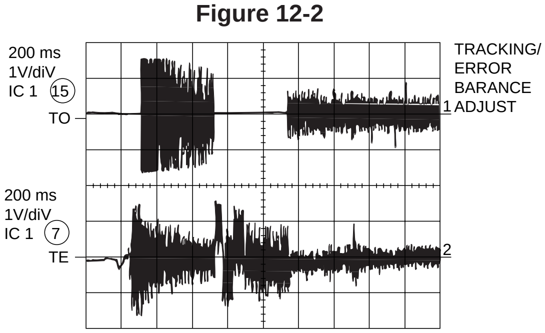


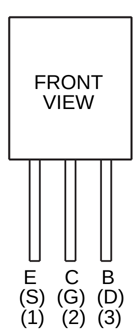
Figure 12-4

NOTES ON SCHEMATIC DIAGRAM

- Resistor:
  To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with “Fusible” is a fuse type.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means micro-micro-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression “capacitance/withstand voltage” is used.
  (CH), (TH), (RH), (UJ): Temperature compensation
  (ML): Mylar type
  (P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
  1. In the tuner section,
     ( ) indicates AM
     < > indicates FM stereo
  2. In the main section, a tape is being played back.
  3. In the deck section, a tape is being played back.
     ( ) indicates the record state.
  4. In the power section, a tape is being played back.
  5. In the CD section, the CD is stopped.
- Parts marked with “⚠” ([— — —]) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

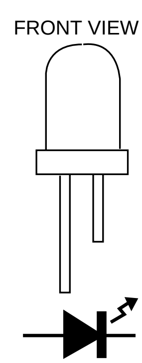
REF. NO	DESCRIPTION	POSITION
JOG701	VOLUME JOG	ON—OFF
SW1	OPEN/CLOSE	ON—OFF
SW2	MECHA UP	ON—OFF
SW3	DISC NUMBER	ON—OFF
SW4	PICKUP IN	ON—OFF
SW701	POWER	ON—OFF
SW703	CLOCK	ON—OFF
SW704	TIMER/SLEEP	ON—OFF
SW705	DISC 1	ON—OFF
SW706	DISC 2	ON—OFF
SW707	DISC 3	ON—OFF
SW708	DISC SKIP	ON—OFF
SW709	OPEN/CLOSE	ON—OFF
SW710	REV	ON—OFF
SW711	REC PAUSE	ON—OFF
SW712	MEMORY/SET	ON—OFF

REF. NO	DESCRIPTION	POSITION
SW713	STOP	ON—OFF
SW714	TUNER (BAND)	ON—OFF
SW715	VIDEO/AUX	ON—OFF
SW716	TAPE	ON—OFF
SW717	CD	ON—OFF
SW722	FF	ON—OFF
SW723	TUNING UP	ON—OFF
SW724	TUNING DOWN	ON—OFF
SW725	PLAY	ON—OFF
SW728	X-BASS/DEMO	ON—OFF
SW729	EQUALIZER	ON—OFF
SW730	DIMMER	ON—OFF
SWM 3	FOOL PROOF	ON—OFF
SWM 4	F.A.S.	ON—OFF
SWM 5	CAM	ON—OFF



2SA1015 GR
2SA1318
2SC3331
2SC535 C
KRA102 M
KRA109 M
KRC102 M
KRC104 M
KRC107 M

KTA1266 GR
KTA1271 Y
KTA1273 Y
KTA1274 Y
KTD2058
KTC3199 GR
KTC3200 GR
KTC3203 Y



L1154GT4
SLI342YCB
SLI342DCB
SLI342UCB
SLI342YCJ

Figure 13 TYPES OF TRANSISTOR AND LED

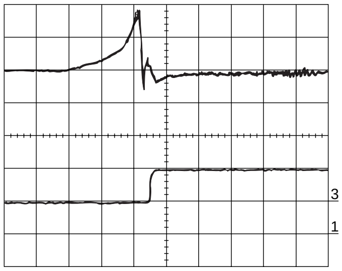
WAVEFORMS OF CD CIRCUIT

STOP → PLAY

FOCUS — SERCH

1 5ms 0.50 V IC1 (20) F.E

2 5ms 5.0 V IC1 (54) DRF

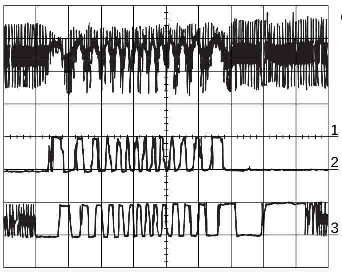


CUE

3 0.5ms 1.00 V HF

4 0.5ms 5.0 V HFL

5 0.5ms 5.0 V TES

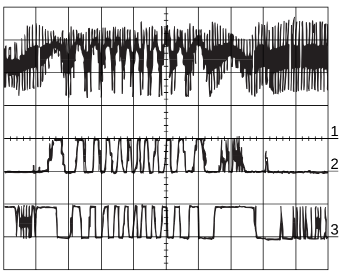


REVIEW

3 0.5ms 1.00 V HF

4 0.5ms 5.0 V HFL

5 0.5ms 5.0 V TES



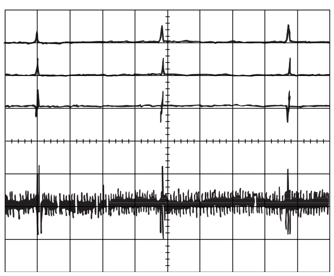
CUE

6 50ms 10.0 V JP+

7 50ms 10.0 V JP-

8 50ms 0.50 V JP

9 50ms 1.00 V TE

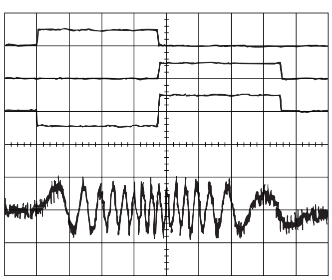


6 0.5ms 10.0 V JP+

7 0.5ms 10.0 V JP-

8 0.5ms 0.50 V JP

9 0.5ms 1.00 V TE



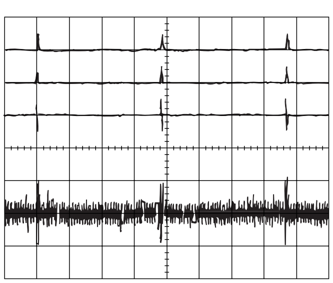
REVIEW

6 50ms 10.0 V JP+

7 50ms 10.0 V JP-

8 50ms 0.50 V JP

9 50ms 1.00 V TE

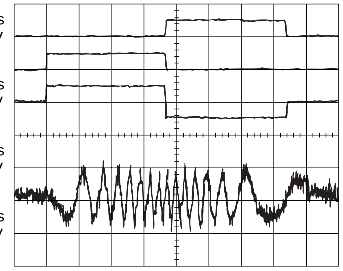


6 0.5ms 10.0 V JP+

7 0.5ms 10.0 V JP-

8 0.5ms 0.50 V JP

9 0.5ms 1.00 V TE

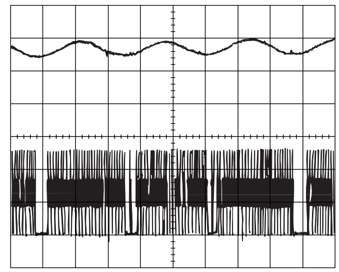


PLAY

NORMAL DISC
TN0=01

10 20ms 1.00 V SPO

11 20ms 2.00 V CLV+

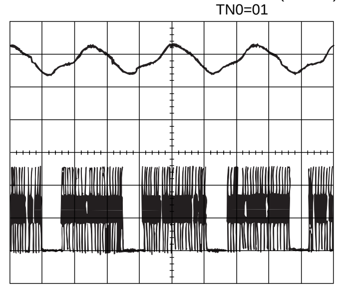


PLAY

TCD-712 (140mm)
TN0=01

10 50ms 1.00 V SPO

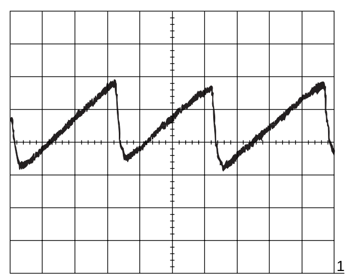
11 50ms 2.00 V CLV+



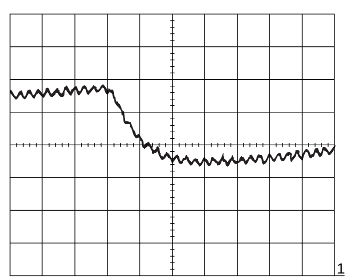
PLAY

TCD-712

12 5s 100mV SLD



12 0.5s 100mV SLD



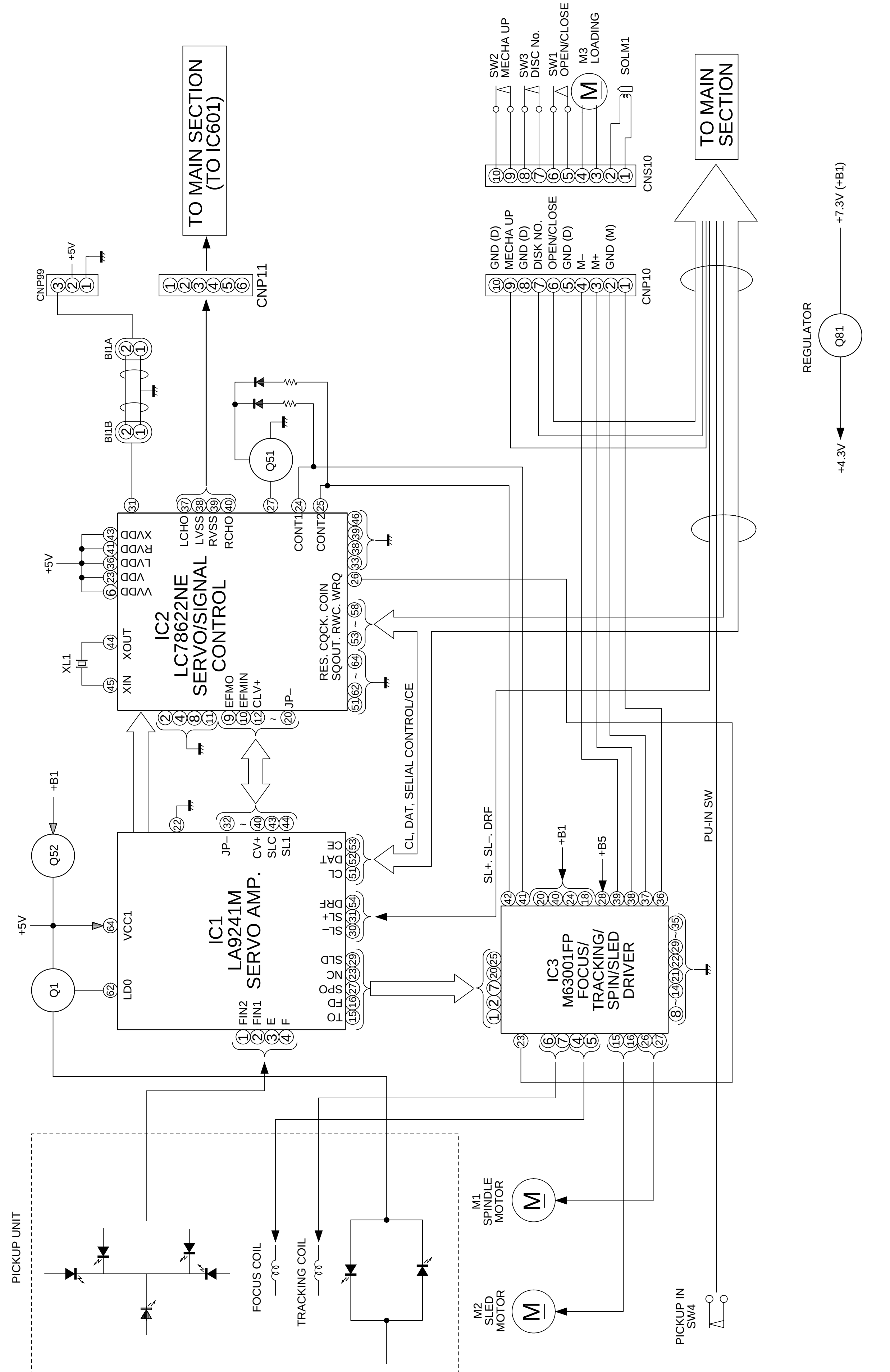


Figure 15 BLOCK DIAGRAM (1/3)

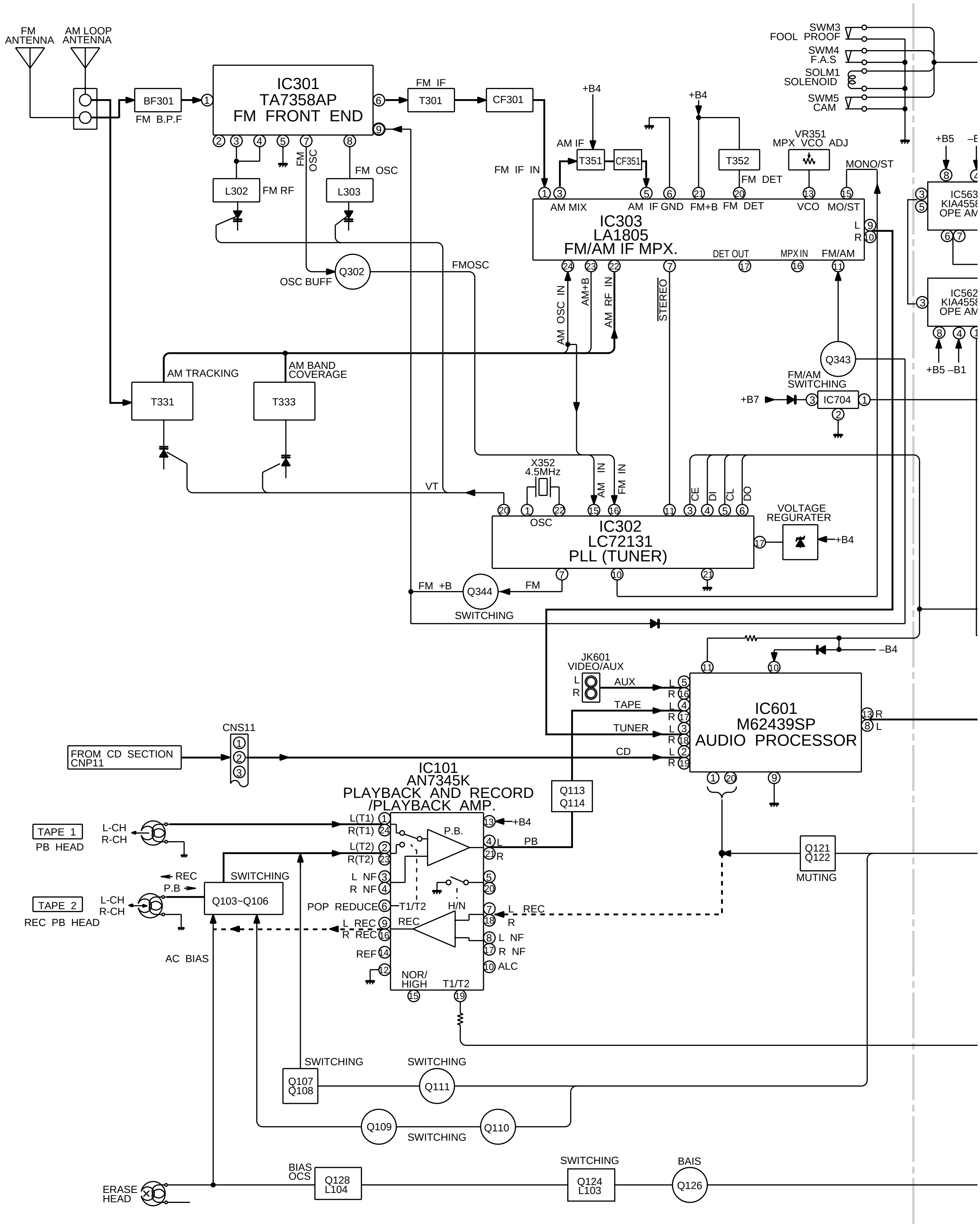


Figure 16 BLOCK DIAGRAM (2/3)

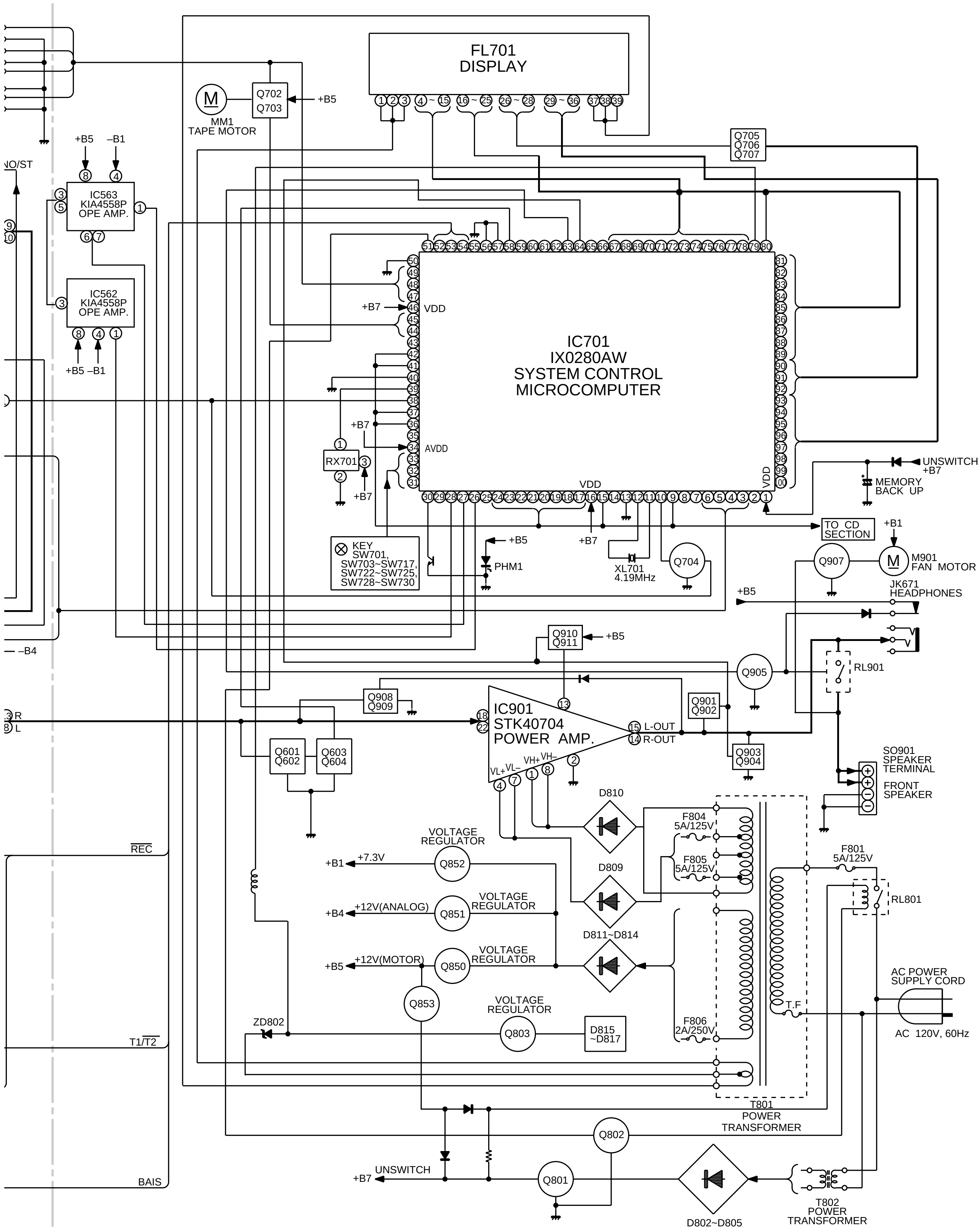
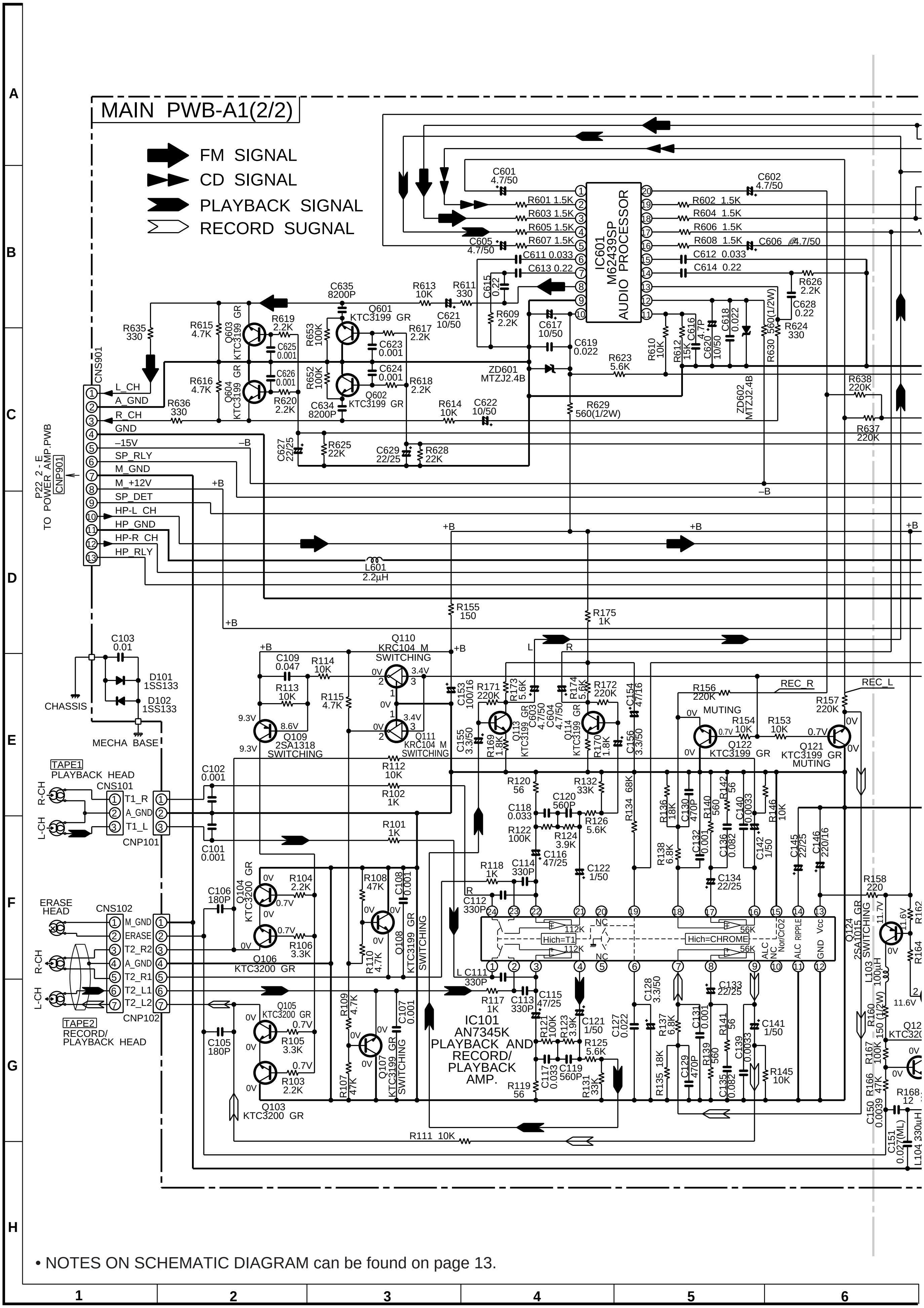
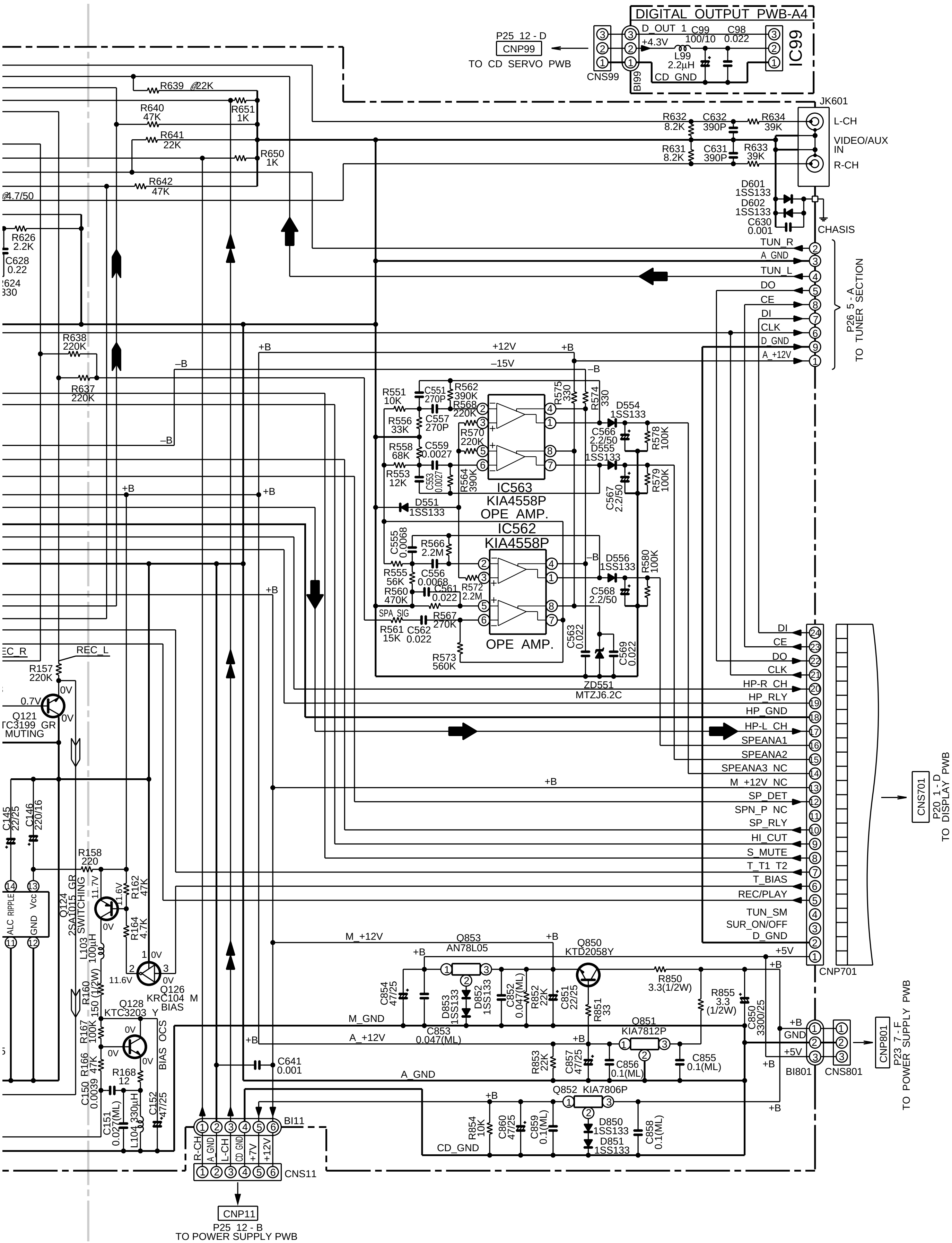


Figure 17 BLOCK DIAGRAM (3/3)



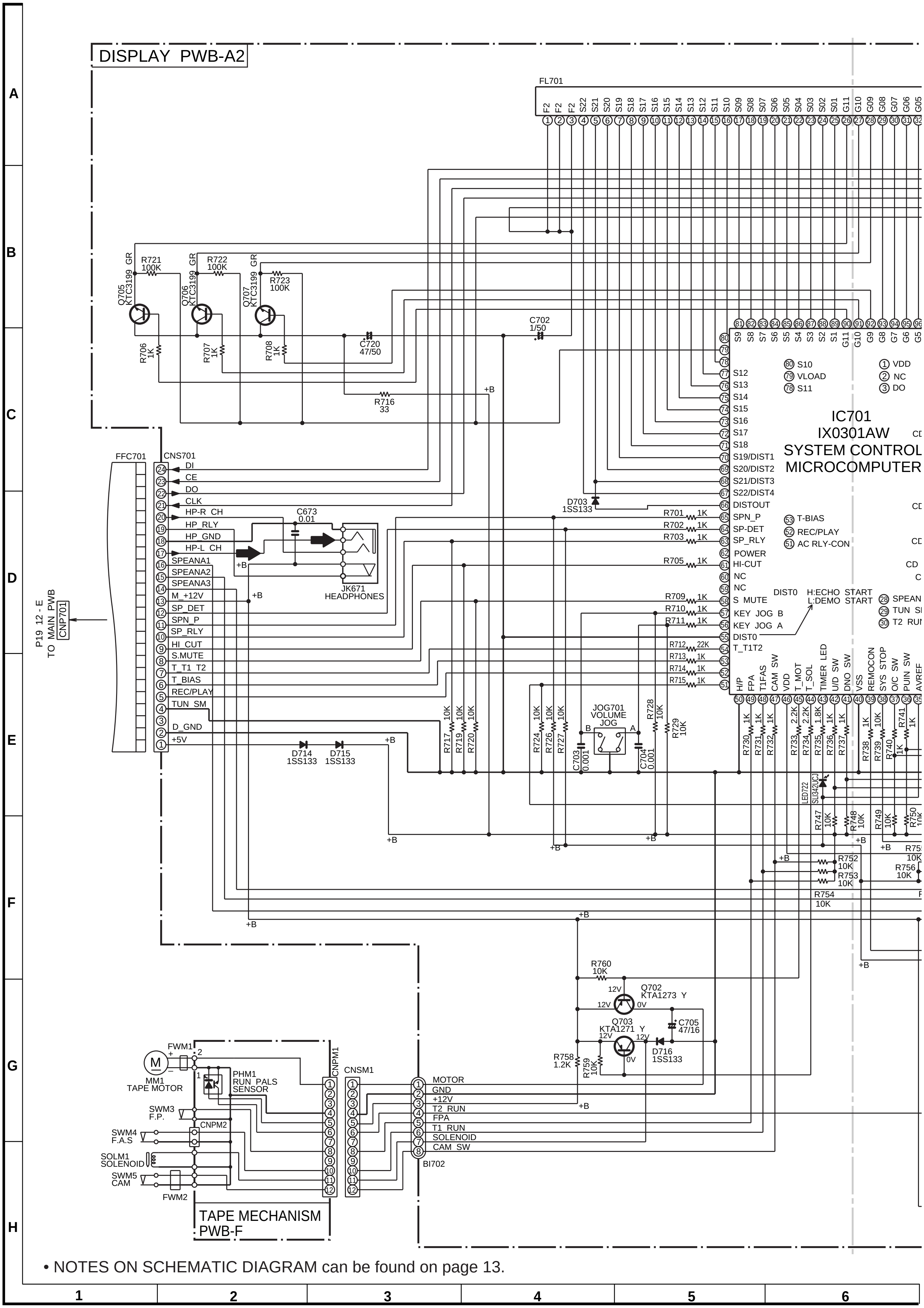
• NOTES ON SCHEMATIC DIAGRAM can be found on page 13.

Figure 18 SCHEMATIC DIAGRAM (1/10)



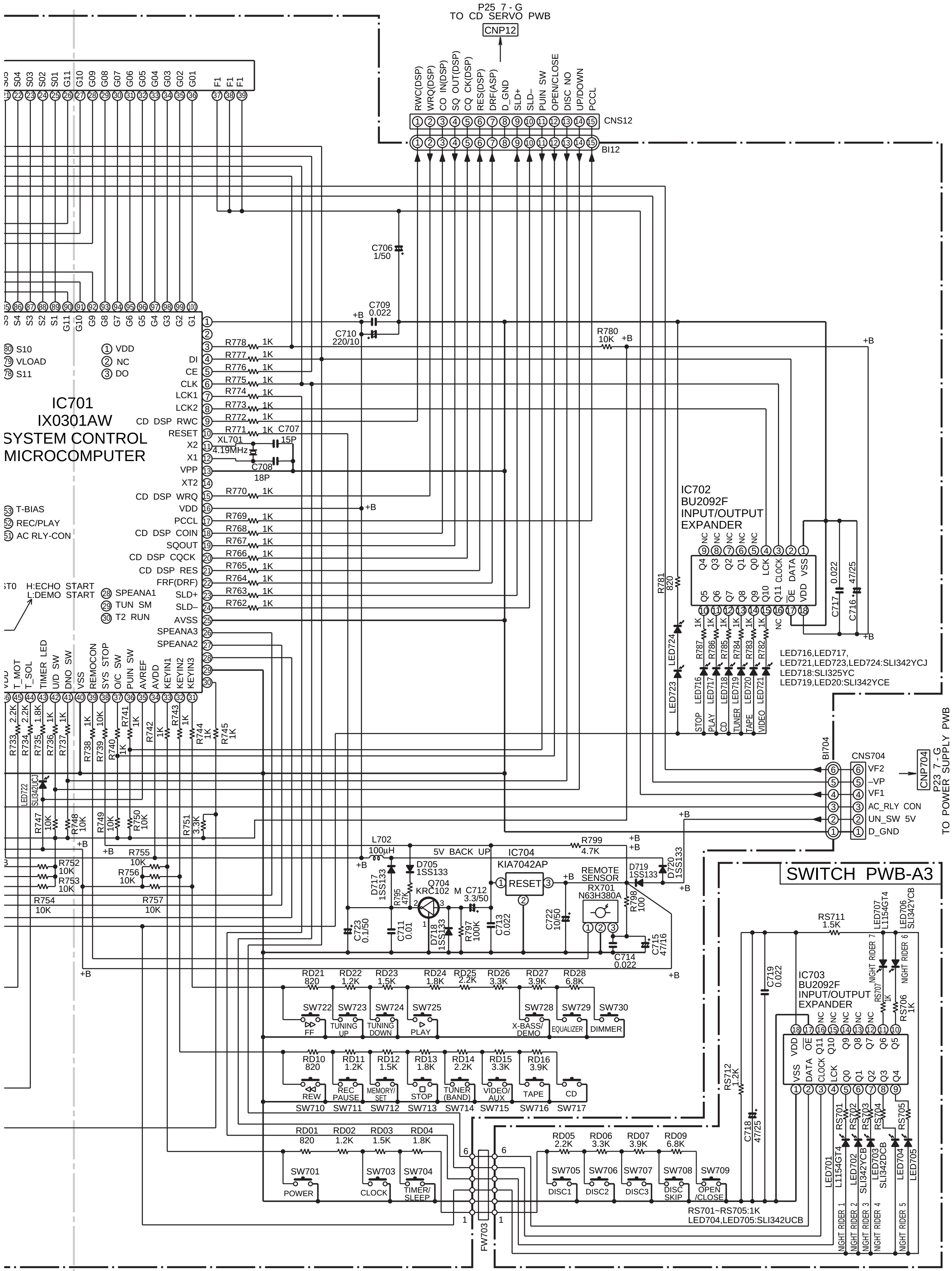
7	8	9	10	11	12

Figure 19 SCHEMATIC DIAGRAM (2/10)



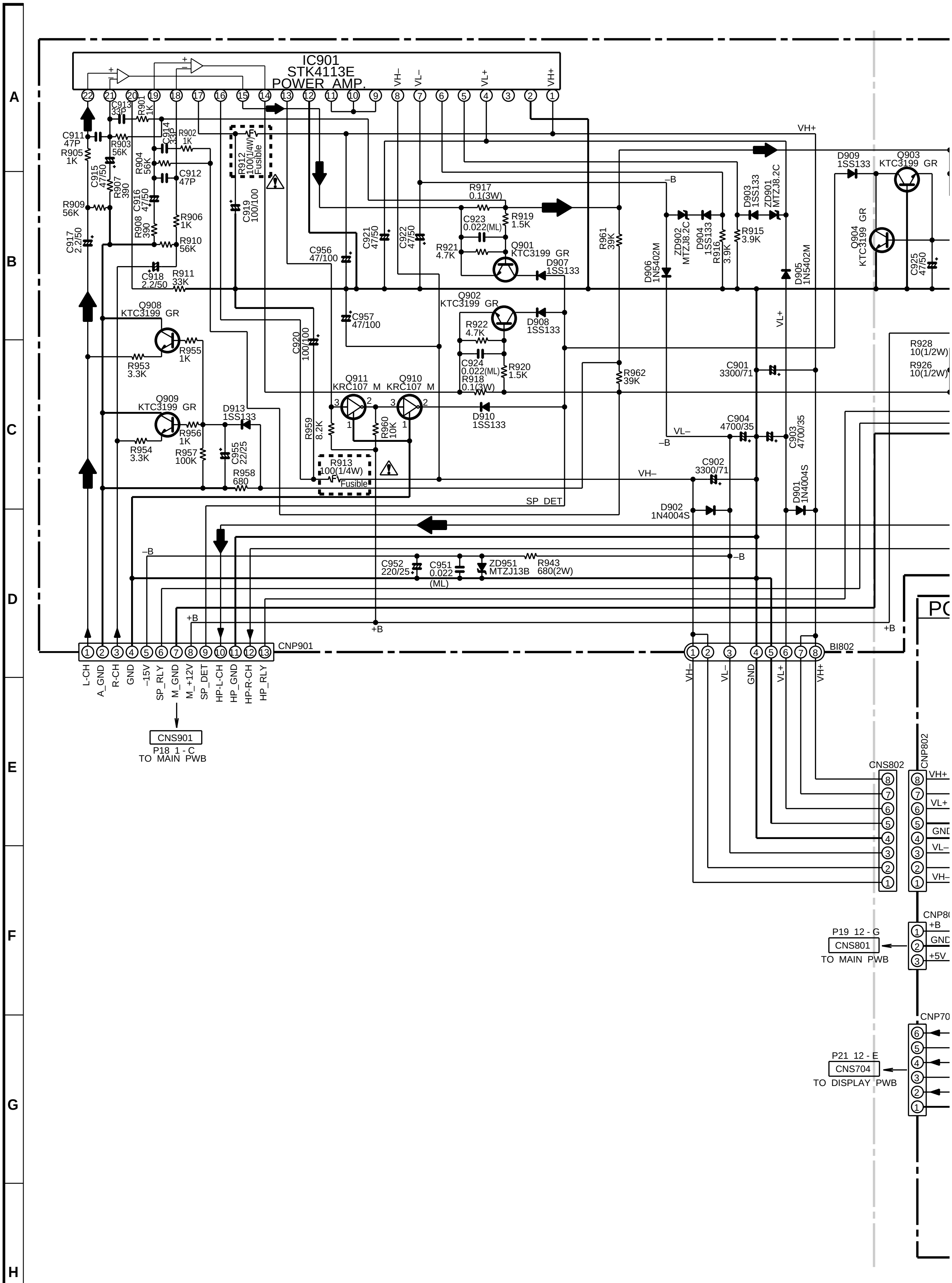
• NOTES ON SCHEMATIC DIAGRAM can be found on page 13.

Figure 20 SCHEMATIC DIAGRAM (3/10)



7	8	9	10	11	12

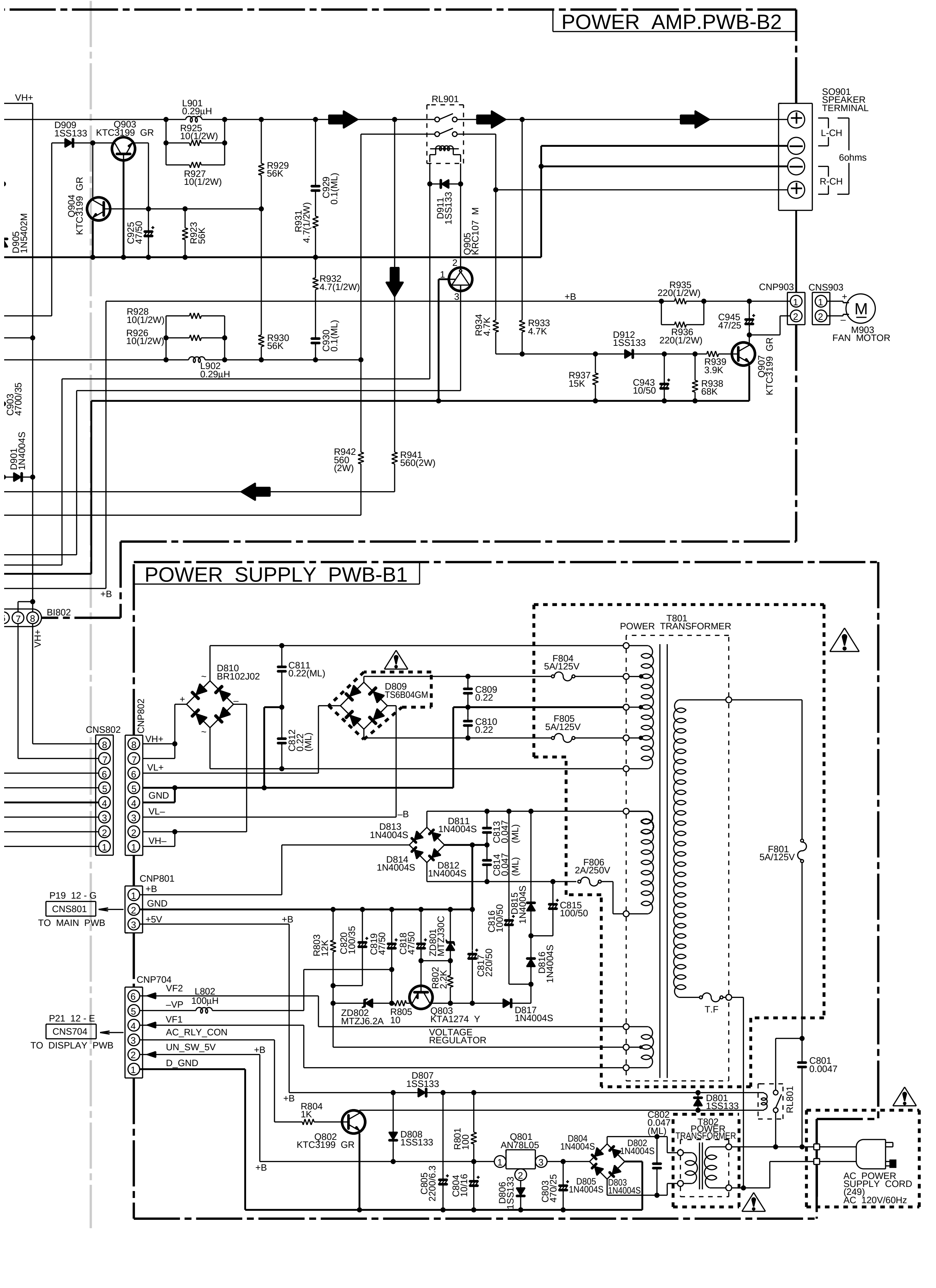
Figure 21 SCHEMATIC DIAGRAM (4/10)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 13.

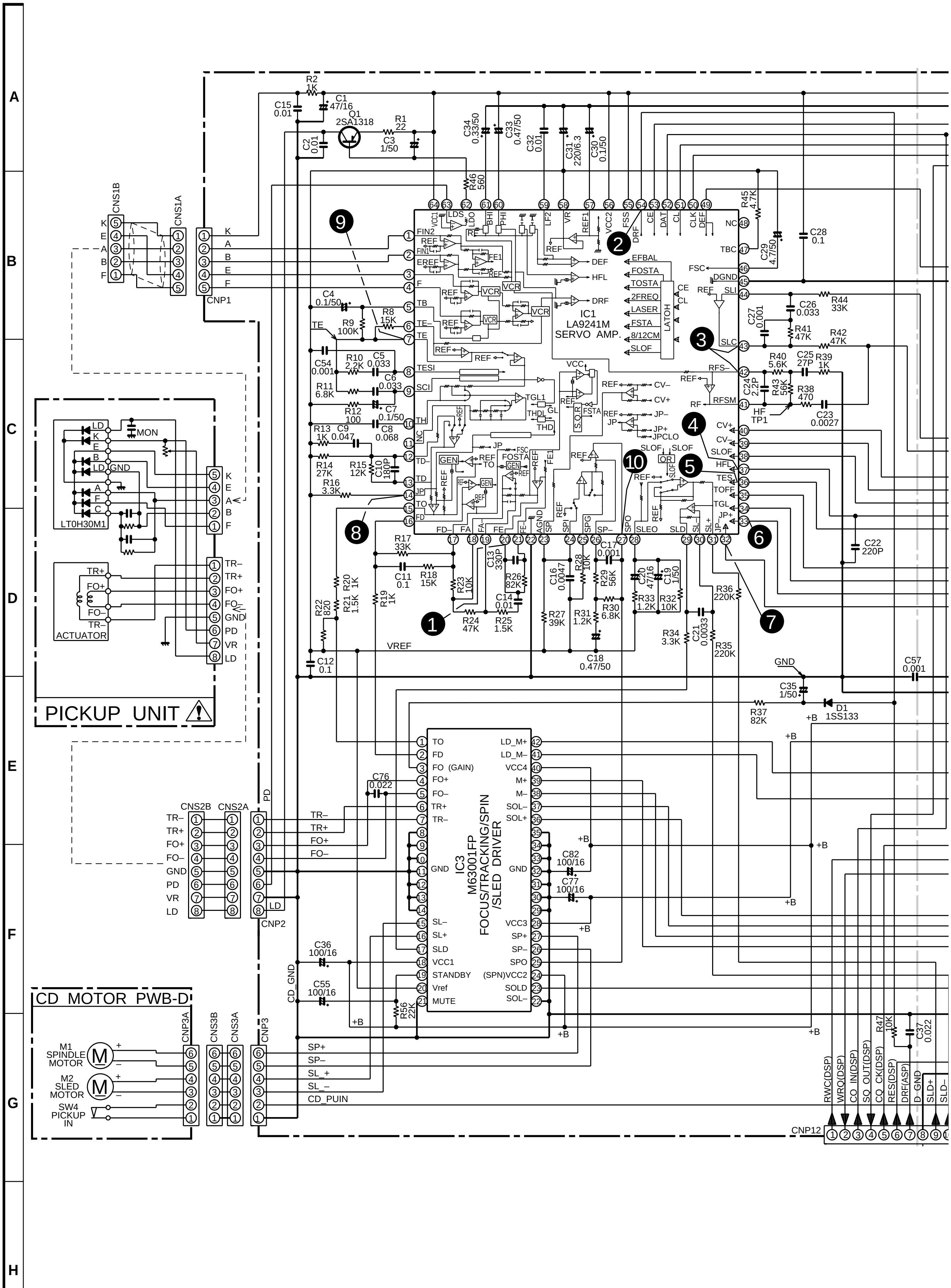
1 2 3 4 5 6

Figure 22 SCHEMATIC DIAGRAM (5/10)



7	8	9	10	11	12

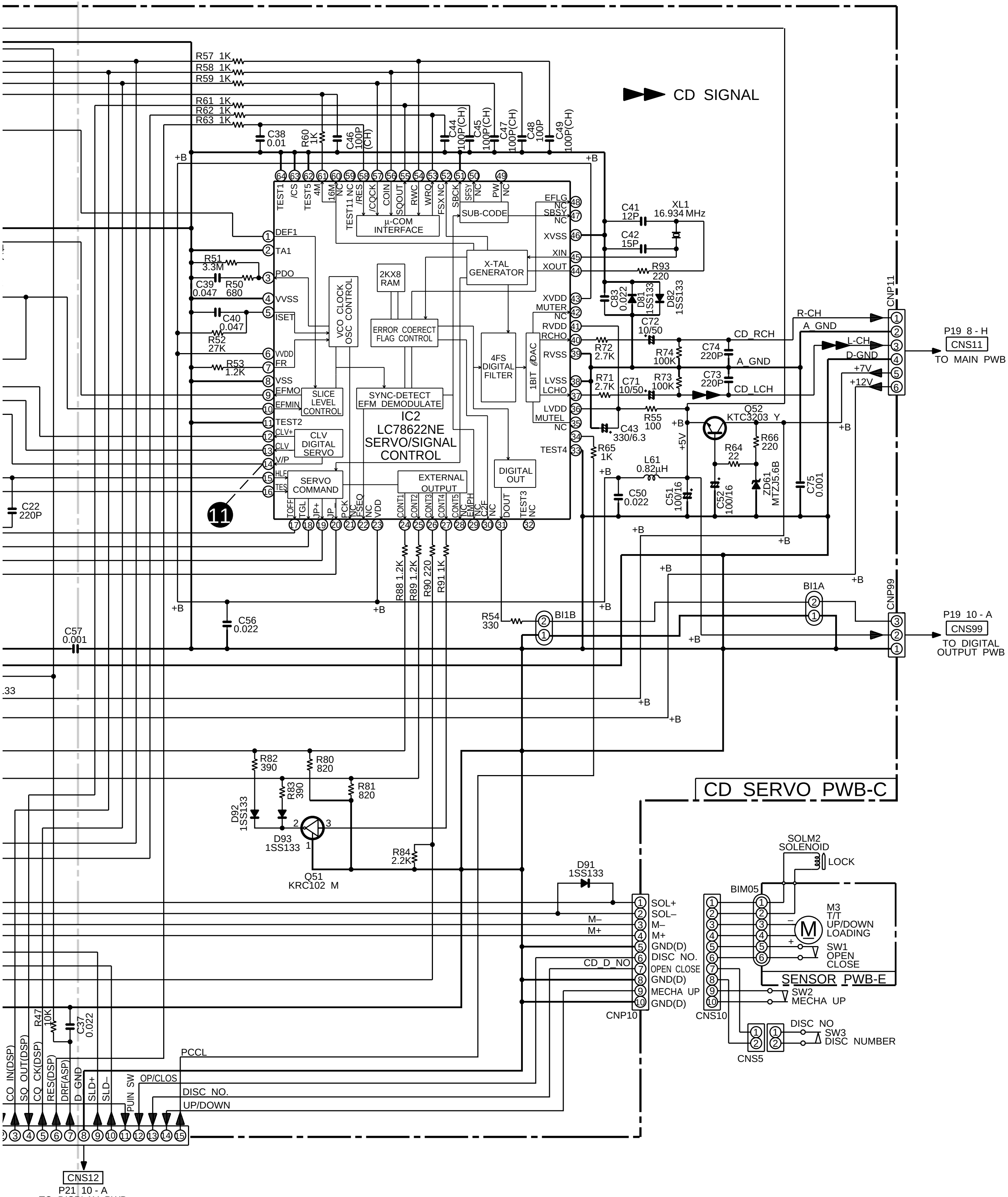
Figure 23 SCHEMATIC DIAGRAM (6/10)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 13.

1 2 3 4 5 6

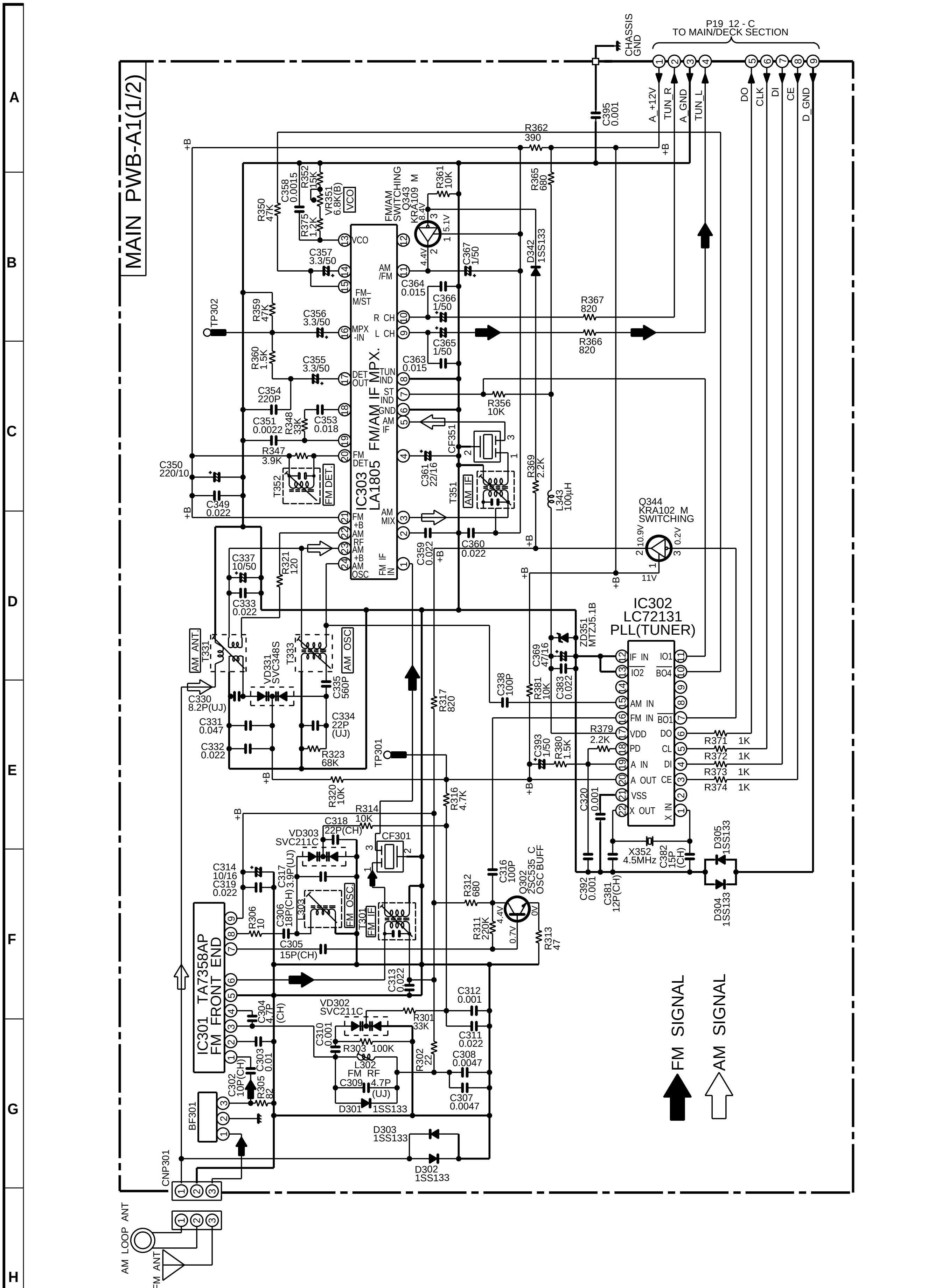
Figure 24 SCHEMATIC DIAGRAM (7/10)



• The numbers 1 to 12 are waveform numbers shown in page 14.

7	8	9	10	11	12

Figure 25 SCHEMATIC DIAGRAM (8/10)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 13.

Figure 26 SCHEMATIC DIAGRAM (9/10)

IC1	
PIN NO.	VOLTAGE
1	2.5V
2	2.5V
3	2.5V
4	2.5V
5	2.5V
6	2.5V
7	2.5V
8	2.5V
9	2.5V
10	2.5V
11	2.5V
12	2.5V
13	2.5V
14	2.5V
15	2.5V
16	2.5V
17	2.5V
18	2.5V
19	2.5V
20	2.5V
21	2.5V
22	0V
23	2.5V
24	2.5V
25	2.5V
26	2.5V
27	2.5V
28	2.5V
29	2.5V
30	2.3V
31	2.3V
32	0V
33	0V
34	5.0V
35	5.0V
36	0V
37	0V
38	5.0V
39	0V
40	0V
41	1.6V
42	2.4V
43	2.4V
44	2.4V
45	0V
46	2.5V
47	2.5V
48	0V
49	0V
50	2.4V
51	4.6V
52	4.6V
53	0V
54	0V
55	5.0V
56	5.0V
57	2.5V
58	2.5V
59	1.0V
60	1.0V
61	2.2V
62	4.2V
63	0V
64	5.0V

IC2	
PIN NO.	VOLTAGE
1	0V
2	0V
3	0V
4	0V
5	1.9V
6	5.0V
7	0V
8	0V
9	2.5V
10	2.4V
11	0V
12	0V
13	0V
14	5.0V
15	0V
16	0V
17	5.0V
18	5.0V
19	0V
20	0V
21	2.5V
22	0V
23	5.0V
24	0V
25	0V
26	0V
27	0V
28	0V
29	0V
30	5.0V
31	2.5V
32	0V
33	0V
34	0V
35	5.0V
36	4.6V
37	1.9V
38	0V
39	0V
40	1.9V
41	4.6V
42	5.0V
43	5.0V
44	2.1V
45	2.1V
46	0V
47	0.1V
48	2.3V
49	0V
50	2.5V
51	0V
52	2.5V
53	0V
54	0V
55	0V
56	4.6V
57	4.6V
58	4.7V
59	0V
60	2.3V
61	2.3V
62	0V
63	0V
64	0V

IC3	
PIN NO.	VOLTAGE
1	2.5V
2	2.6V
3	2.9V
4	3.3V
5	3.3V
6	3.3V
7	3.3V
8	0V
9	0V
10	0V
11	0V
12	0V
13	0V
14	0V
15	3.3V
16	3.3V
17	3.0V
18	7.2V
19	5.0V
20	2.5V
21	0V
22	0V
23	0V
24	7.2V
25	2.5V
26	3.3V
27	3.3V
28	11.2V
29	0V
30	0V
31	0V
32	0V
33	0V
34	0V
35	0V
36	5.3V
37	5.3V
38	3.3V
39	3.3V
40	7.2V
41	0.1V
42	0.1V

IC101	
PIN NO.	VOLTAGE
1	0V (0V)
2	0V (0V)
3	0.5V (0.5V)
4	4.3V (4.3V)
5	0V (0V)
6	1.2V (1.3V)
7	0V (0V)
8	0.6V (0.6V)
9	4.2V (4.2V)
10	4.1V (4.1V)
11	0V (0V)
12	0V (0V)
13	8.3V (8.3V)
14	4.8V (4.8V)
15	0V (0V)
16	4.1V (4.1V)
17	0.6V (0.6V)
18	0V (0V)
19	0.8V (0.8V)
20	0.8V (0.8V)
21	4.3V (4.3V)
22	0.5V (0.5V)
23	0V (0V)
24	0V (0V)

IC301	
PIN NO.	VOLTAGE
1	0.9V (0V)
2	1.6V (0V)
3	5.8V (0.4V)
4	1.6V (0V)
5	0V (0V)
6	5.9V (0.4V)
7	5.2V (0.2V)
8	5.8V (0.3V)
9	5.9V (0.3V)

IC562	
PIN NO.	VOLTAGE
1	0.2V
2	0.2V
3	0.2V
4	–7.7V
5	0V
6	0V
7	0V
8	6.3V

IC563	
PIN NO.	VOLTAGE
1	0.1V
2	0.2V
3	0.1V
4	–7.7V
5	0.1V
6	0.2V
7	0.1V
8	6.3V

IC901	
PIN NO.	VOLTAGE
1	56.0V
2	0V
3	24.4V
4	25.0V
5	15.9V
6	–16.0V
7	–24.9V
8	–55.9V
9	–24.3V
10	–24.3V
11	–24.3V
12	0V
13	4.2V
14	0V
15	0V
16	–54.5V
17	54.6V
18	–0.15V
19	–0.15V
20	–53.1V
21	–0.15V
22	–0.15V

IC704	
PIN NO.	VOLTAGE
1	5.0V
2	0V
3	5.0V

IC302	
PIN NO.	VOLTAGE
1	2.6V (2.6V)
2	0V (0V)
3	0V (0V)
4	0V (0V)
5	4.4V (4.4V)
6	4.8V (4.8V)
7	0.2V (11.9V)
8	0V (0V)
9	0V (0V)
10	0V (0V)
11	5.2V (5.2V)
12	0V (0V)
13	0V (0V)
14	0V (0V)
15	0V (2.6V)
16	2.5V (0V)
17	5.2V (5.2V)
18	0.9V (0.9V)
19	0.9V (0.9V)
20	1.3V (1.1V)
21	0V (0V)
22	2.6V (2.6V)

IC601	
PIN NO.	VOLTAGE
1	0V
2	0V
3	0V
4	0V
5	–0.2V
6	0V
7	0V
8	0V
9	0V
10	2.6V
11	0.1V
12	–2.6V
13	0V
14	0V
15	0V
16	0V
17	0V
18	0V
19	0V
20	0V

IC702	
PIN NO.	VOLTAGE
1	0V
2	0V
3	0.4V
4	0V
5	0V
6	0V
7	0V
8	0V
9	0V
10	0.4V
11	0.4V
12	0.4V
13	9.6V
14	9.6V
15	9.6V
16	0V
17	0V
18	4.8V

IC303	
PIN NO.	VOLTAGE
1	1.6V (1.7V)
2	1.6V (1.7V)
3	7.0V (8.4V)
4	0.3V (0.6V)
5	1.6V (1.7V)
6	0V (0V)
7	5.2V (5.2V)
8	0V (0V)
9	2.2V (2.3V)
10	2.4V (2.5V)
11	6.3V (8.3V)
12	0.9V (0.9V)
13	1.1V (0V)
14	1.8V (1.7V)
15	0.9V (1.2V)
16	1.7V (1.7V)
17	1.5V (1.7V)
18	1.6V (1.6V)
19	0.4V (0.5V)
20	7.0V (8.4V)
21	7.0V (8.4V)
22	1.6V (1.7V)
23	1.6V (1.7V)
24	1.6V (1.7V)

IC703	
PIN NO.	VOLTAGE
1	0V
2	0V
3	0.4V
4	0V
5	0.4V
6	0.4V
7	0.4V
8	0.4V
9	0.4V
10	0.4V
11	0.4V
12	9.6V
13	9.6V
14	9.6V
15	12.9V
16	10.9V
17	0V
18	5.0V

IC701			
PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	4.8V	51	4.8V
2	4.8V	52	4.8V
3	4.8V	53	0V
4	0V	54	4.8V
5	0V	55	0V
6	0V	56	0V
7	0V	57	0V
8	0V	58	4.8V
9	0V	59	4.9V
10	4.8V	60	4.9V
11	2.3V	61	0V
12	2.2V	62	4.8V
13	0V	63	4.8V
14	4.9V	64	5.1V
15	0V	65	5.1V
16	4.9V	66	–21.5V
17	0V	67	–20.0V
18	4.8V	68	–19.5V
19	0V	69	–21.3V
20	4.8V	70	–21.3V
21	4.8V	71	–21.3V
22	0V	72	–27.5V
23	0V	73	0V
24	0V	74	–0.7V
25	0V	75	–20.7V
26	0V	76	–18.0V
27	0V	77	–23.3V
28	0V	78	0V
29	0V	79	–28.7V
30	4.8V	80	–0.1V
31	5.1V	81	–20.4V
32	5.1V	82	–20.6V
33	5.1V	83	–0.1V
34	4.8V	84	–23.3V
35	5.0V	85	–18.5V
36	4.7V	86	–21.1V
37	0V	87	0V
38	5.0V	88	–0.5V
39	5.0V	89	–20.5V
40	0V	90	–25.8V
41	4.7V	91	–25.8V
42	0V	92	–25.8V
43	3.8V	93	–25.8V
44	11.3V	94	–25.8V
45	11.3V	95	–25.8V
46	4.8V	96	–25.8V
47	4.7V	97	–25.8V
48	4.7V	98	–25.8V
49	4.7V	99	–25.8V
50	0V	100	–25.8V

Q850	
PIN NO.	VOLTAGE
1	11.3V
2	18.1V
3	11.9V

Q851	
PIN NO.	VOLTAGE
1	11.9V
2	0V
3	19.1V

Q852	
PIN NO.	VOLTAGE
1	7.3V
2	1.3V
3	19.0V

Q853	
PIN NO.	VOLTAGE
1	6.3V
2	1.2V
3	11.3V

7	8	9	10	11	12

Figure 27 SCHEMATIC DIAGRAM (10/10)

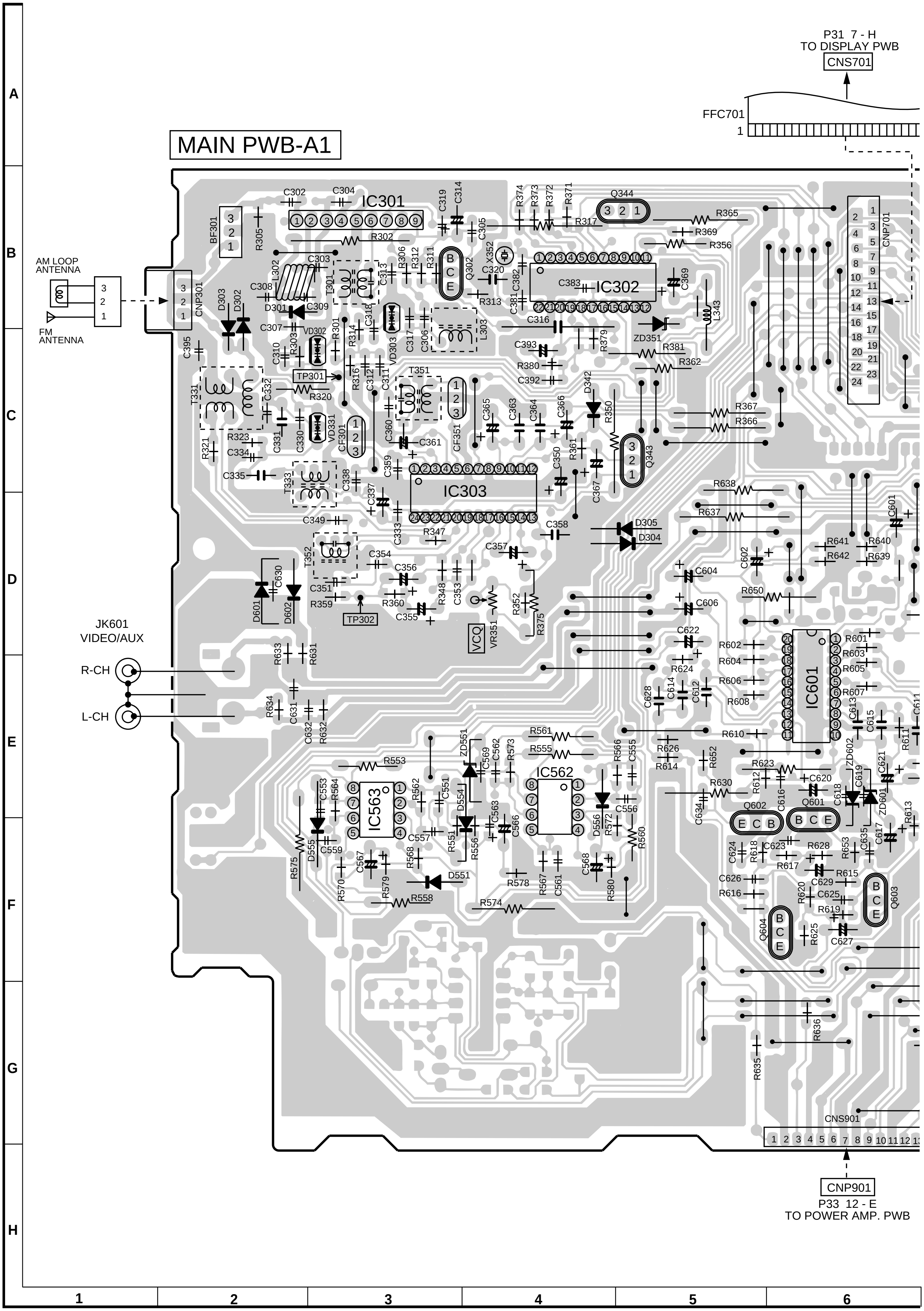
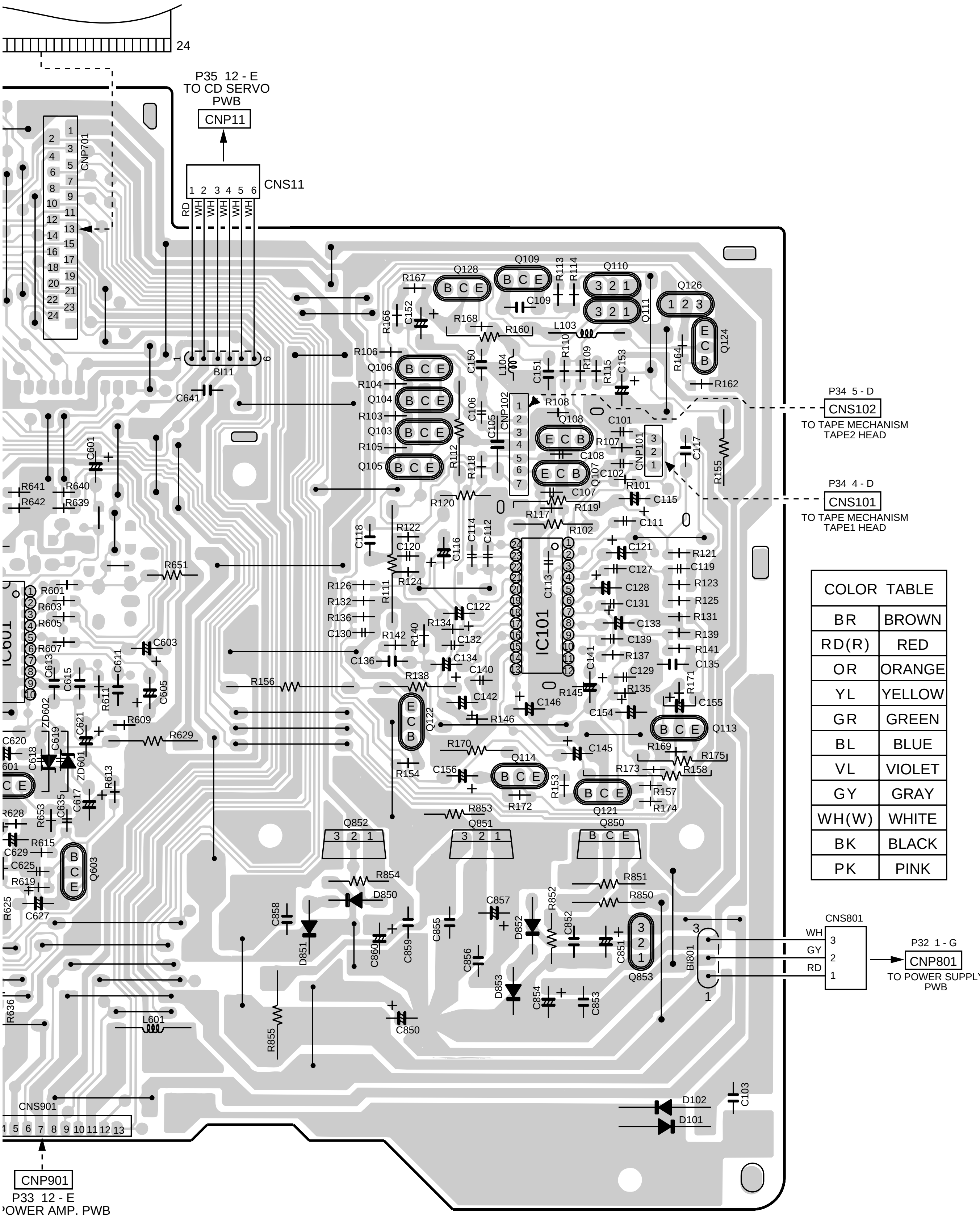


Figure 28 WIRING SIDE OF P.W.BOARD (1/8)



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

7	8	9	10	11	12

Figure 29 WIRING SIDE OF P.W.BOARD (2/8)

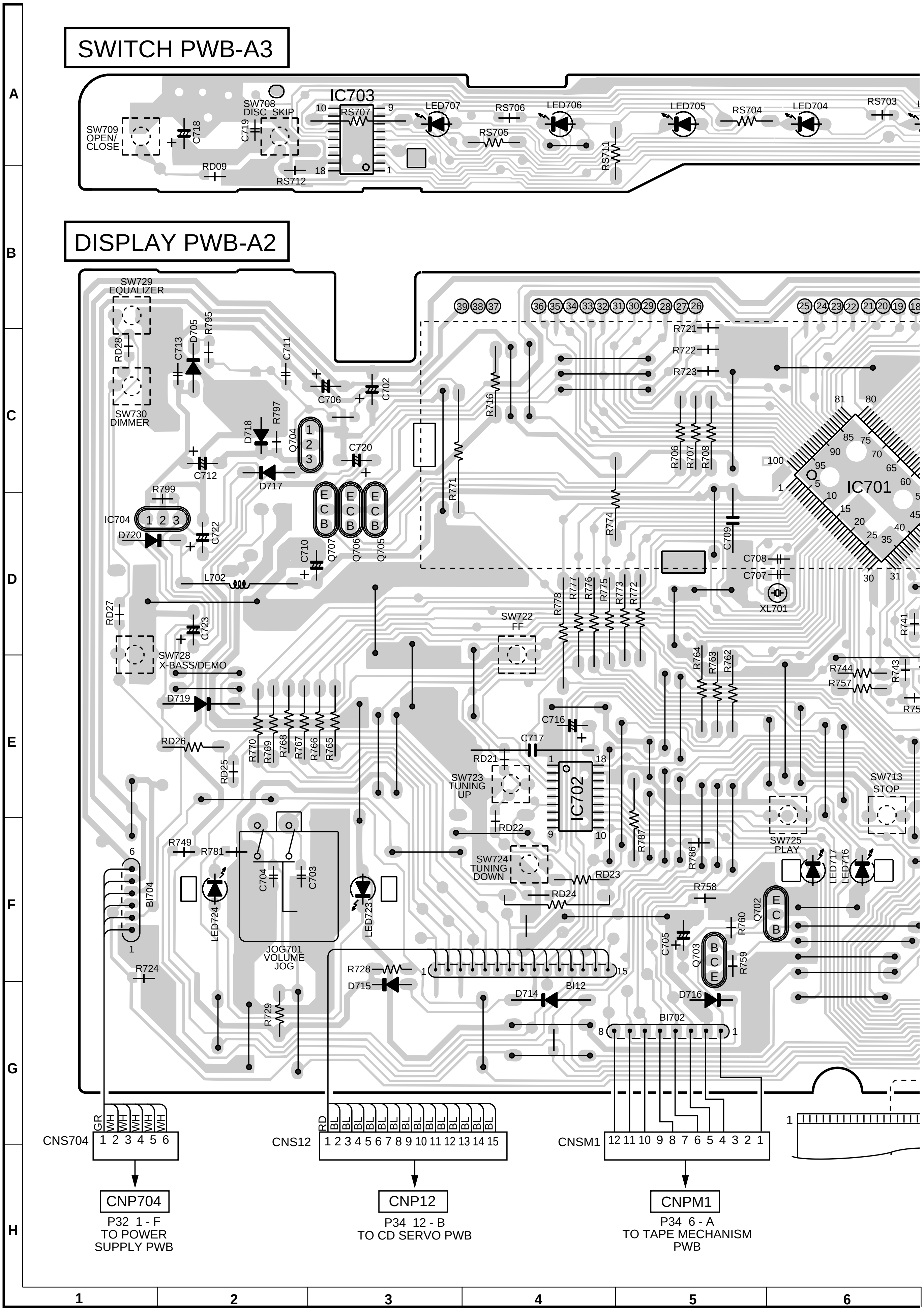
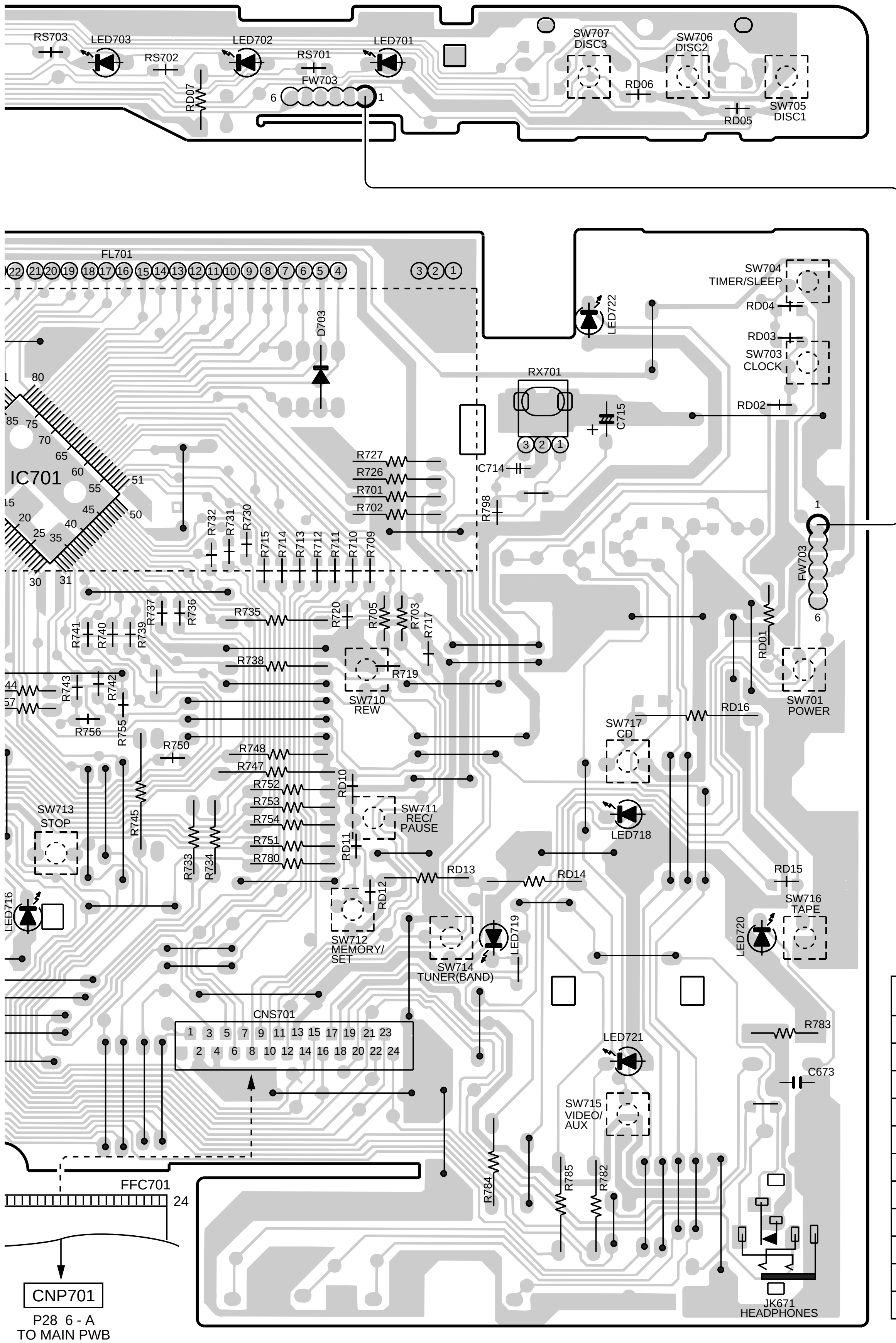


Figure 30 WIRING SIDE OF P.W.BOARD (3/8)



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

7	8	9	10	11	12

Figure 31 WIRING SIDE OF P.W.BOARD (4/8)

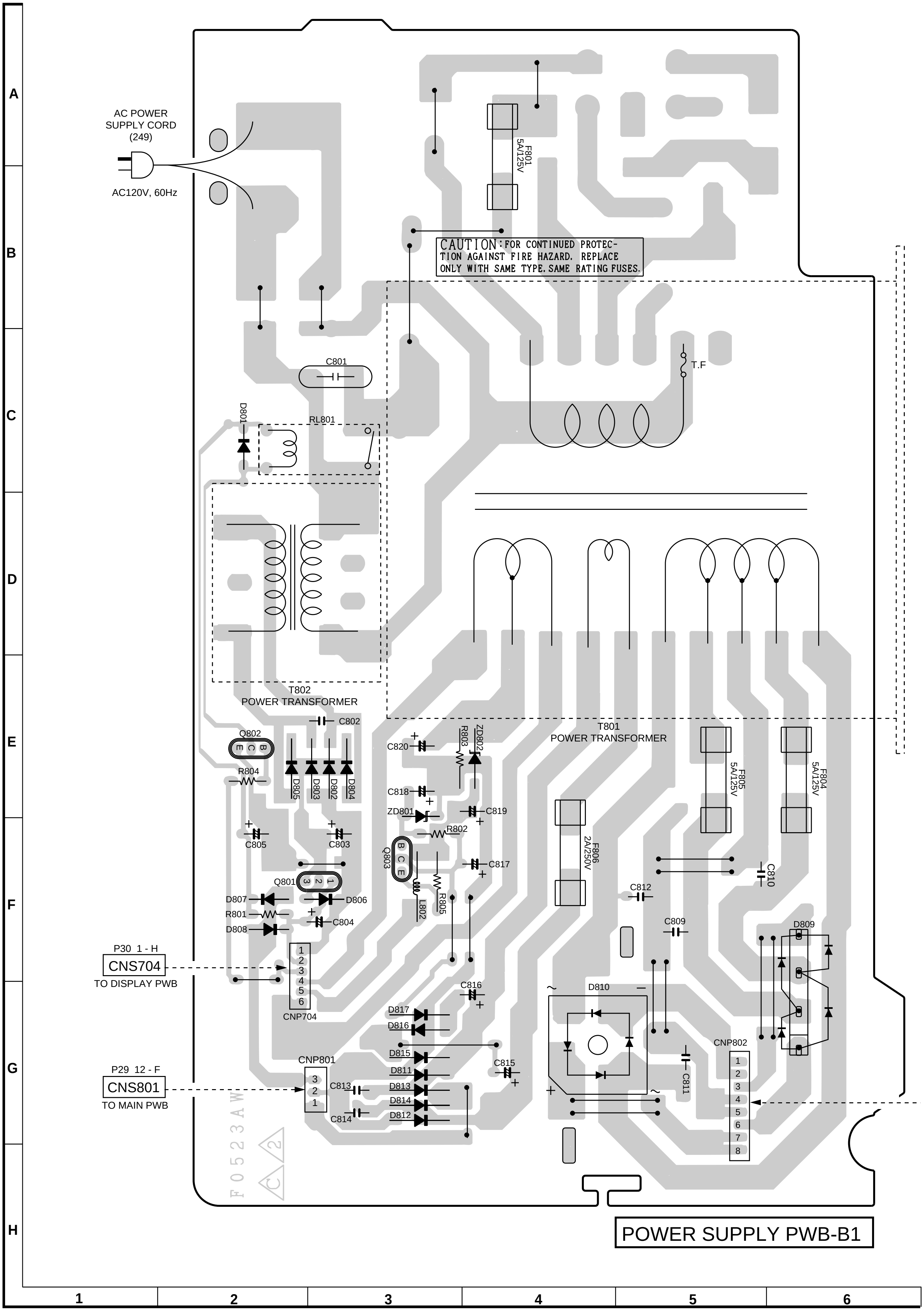
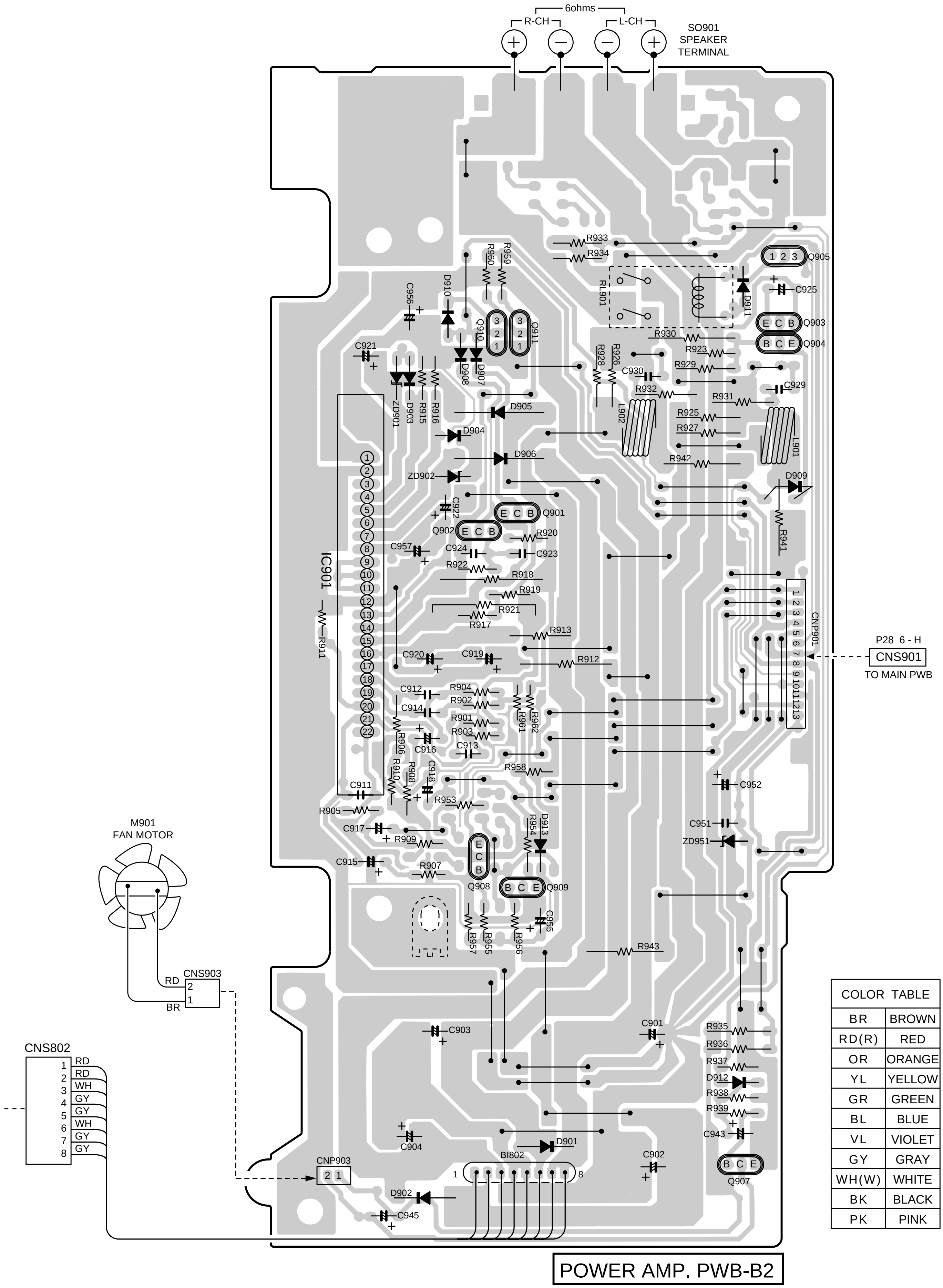


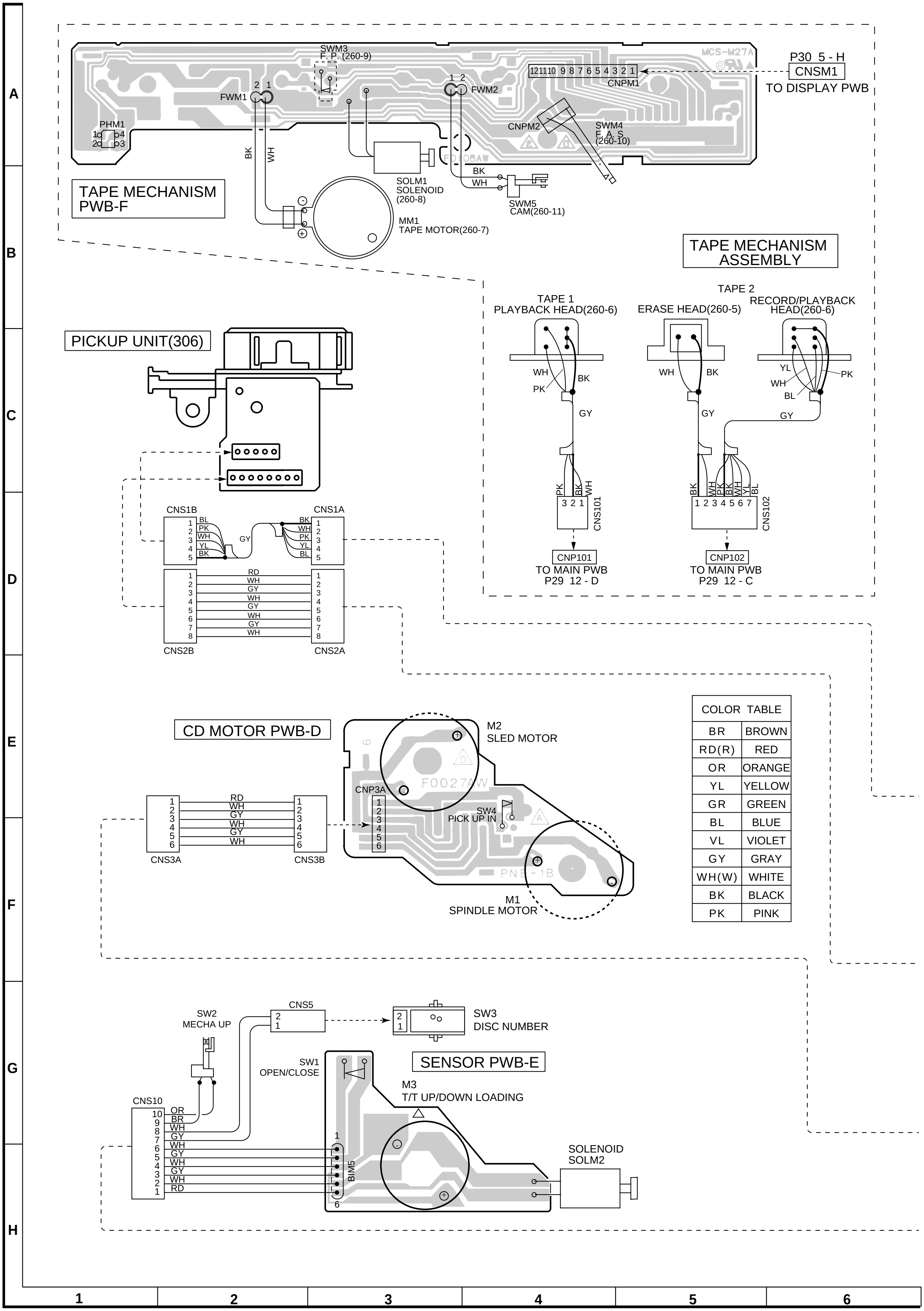
Figure 32 WIRING SIDE OF P.W.BOARD (5/8)



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

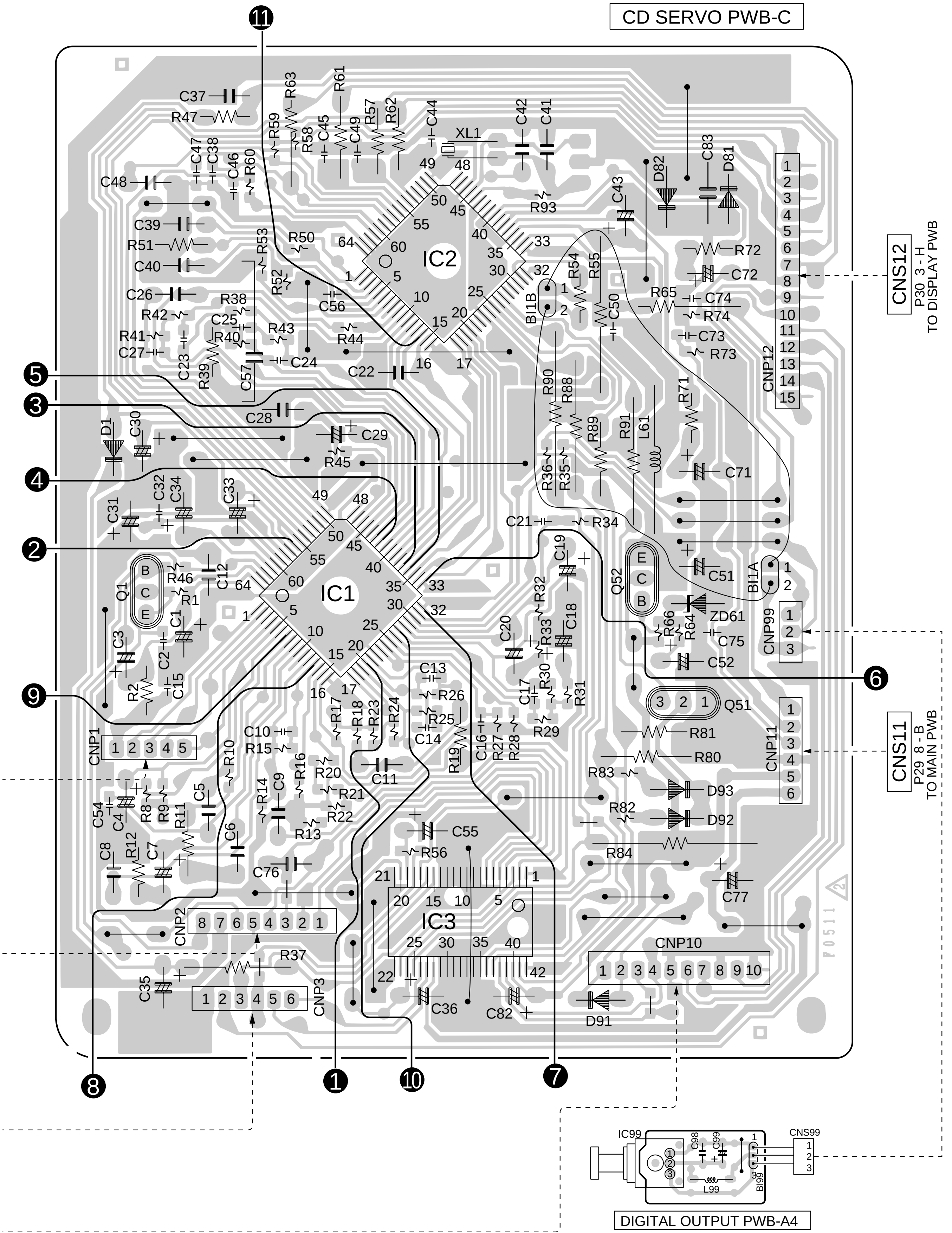
7	8	9	10	11	12

Figure 33 WIRING SIDE OF P.W.BOARD (6/8)



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

Figure 34 WIRING SIDE OF P.W.BOARD (7/8)



• The numbers ⓫ to ⓬ are waveform numbers shown in page 14.

7	8	9	10	11	12

Figure 35 WIRING SIDE OF P.W.BOARD (8/8)

TROUBLESHOOTING (CD SECTION)

When the CD does not function

When the CD section does not operate when the objective lens of the optical pickup is dirty, this section may not operate. Clean the objective lens, and check the playback operation. When this section does not operate even after the above step is taken, check the following items.
Remove the cabinet and follow the troubleshooting instructions.
"Track skipping and/or no TOC (Table Of Contents) may be caused by build up of dust other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

Turn the power off.
Gently clean the lens with a lens cleaning tissue and a small amount of isopropyl alcohol.
Do not touch the lens with the bare hand.

Dust gradually accumulates on the objective lens during use, and it may degrade performance.
To avoid this problem, use a cleaning disc designed for CD optical pickup lenses.

HOW TO USE

1. Using the brush in the cleaner cap, apply 1 or 2 drops of the cleaning fluid to the brush on the CD cleaner disc which has ▲ the mark next to it.
2. Place the CD cleaner disc onto the CD disc tray with the brush side down, then press the play button.
3. You will hear music for about 20 seconds and the CD player will automatically stop. If it continues to turn, press the stop button.

CAUTION

- The CD lens cleaner should be effective for 30 - 50 operations, however if the brushes become worn out earlier then please replace the cleaner disc.
- If the CD cleaner brushes become very wet then wipe off any excess fluid with a soft cloth.
- Do not drink the cleaner fluid or allow it to come in contact with the eyes. In the event of this happening then drink and / or rinse with clean water and seek medical advice.
- The CD cleaner disc must not be used on car CD player or on computer CD ROM drives.

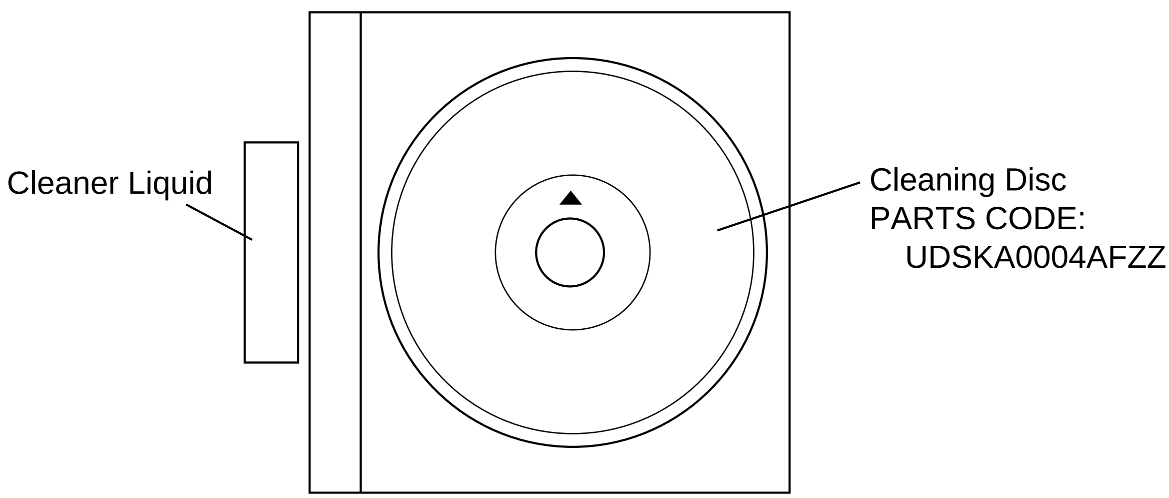


Figure 36

• When the turntable fails to stop.

Is from 5V 2.5V 0V 5 V till 2.5V down pulse (approx. 300 ms) input into the IC701 pin 21 when the turntable is rotating?

- No → Check the SWM3 and the wiring from the IC701 pin 21 to the SWM3.
- Yes ↓

Is there following voltage input on the IC701 pin 21 in the specific state?
When the CD mechanism is moved up: 0V
In other states: 4.3V

- No → Check the MECHA UP SW and the wiring from the IC701 pin 21 to the MECHA UP SW.
- Yes ↓

Check IC2 pin26 the periphery.

- Yes ↓

IC701 defective.

• When turntable fails to move.

Is there following voltage input on the IC701 pin 21 in the specific state?
When the CD mechanism is moved up: 0V
In other states: 4.3V

- No → Check the MECHA UP SW and the wiring from the IC701 pin 21 to the MECHA UP SW.
- Yes ↓

Is L output from the IC2 pin 26 during SEC when the disc skip switch is pressed?

- No → Check the wiring of IC2 pin 26.
  - OK ↓ IC2 defective.
- Yes ↓

Check turntable motor and turntable mechanism.

• When the CD tray fails to open or close.

Is there following voltage input in specific state of IC701 pin 19?
Open state: 0V
Close state: 0V
Intermediate state between open state and close state: 4.3V

No → Check the OPEN CLOSE SW and the wiring from the IC701 pin 19 to the OPEN CLOSE SW.

Yes ↓

Is H output to IC2 pin 24 or 25 for 7 seconds when the OPEN/CLOSE key is pressed?IC91 is defective. Replace it.

No → Check the wiring of the IC2 pins 24 and 25, IC91 pins 1 and 3. → OK → IC2 defective.

Yes ↓

Is 4V output between IC91 pins 3 and 7 during operation stated above?

No → Check the periphery of IC91. → OK → IC91 defective.

Yes ↓

Check the loading motor (M1) and the loading mechanism.

• The CD function will not work.

The CD operating keys don't work.

Yes ↓

Check the CD, DSP, power supply, and 16.93 MHz clock, and reset terminal.

Yes ↓

Check the waveform of SCK, SO (DATA) and SI (COMM).

Yes ↓

See if the pick-up is in the PICKUP IN SW position.

Yes ↓

If the items mentioned above are OK, check the main microcomputer IC701.

• The CD operating keys work.

Check the Focus - HF system.

Playback can be performed without a disc.

Yes ↓

Does the pick-up move up and down twice?

Yes → Focus search OK

No ↓

Does the output waveform of IC1(16)(FD) match that shown in Fig. 38?

Yes → Check the area around IC5-CNP2.

No ↓

Check the IC1(50)(CLK) line, 4MHz.
Check the microcomputer data on pins (51)(CL), (52)(DAT) and (53)CE.

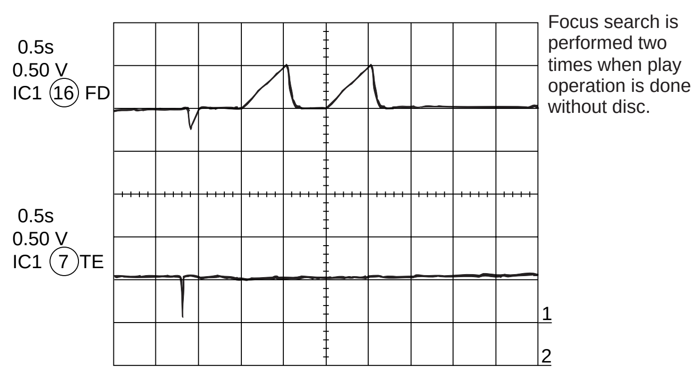


Figure 38

• Playback can only be performed when a disc is loaded.

Is the Focus servo active? (Can you hear it working?)
- No → Check the laser diode driver. Check the area around IC1(16) - (21) (focus servo circuit).
- Yes ↓

Does the DRF signal change from "L" to "H"?
- No → If the disc is not turning, the DRF should not change to "H". → Yes → Check the spin system.
- Yes ↓

Is HF waveform normal (see the Fig. 39-1, 2)?
- No → Level is abnormal. → Yes → Check the periphery of IC1 pins 41 and 42.
- No → Waveform is unstable. → Yes → Check the spin system.
- Yes ↓

Check the tracking system.

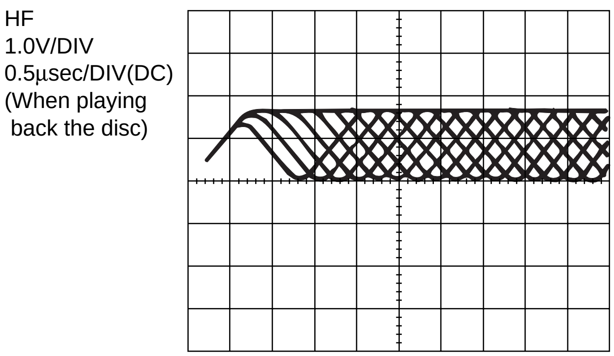


Figure 39-1

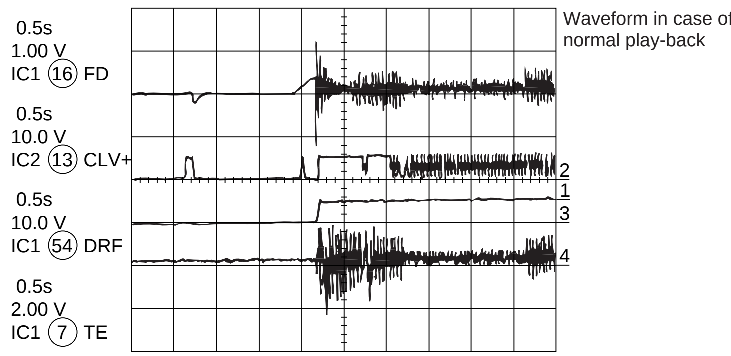


Figure 39-2

• Check the tracking system.

Check waveform of IC1 pin 7 (TE).

- The waveform shown in Fig. 39-3 appears, and no-disc state appears soon. → Yes → Tracking servo is inoperative. → Yes → Check the periphery of IC 1 pin 8 to pin 15, and IC 5 to CNP2.
- Play is possible in TEST mode. → Yes → Although IL is possible, play is impossible. → Yes → Normal jump is impeded, and the program top cannot be reached. → Yes → Check the periphery of IC 1 pin 14.
- Data cannot be read. → Yes → Check the VCO-PLL system.

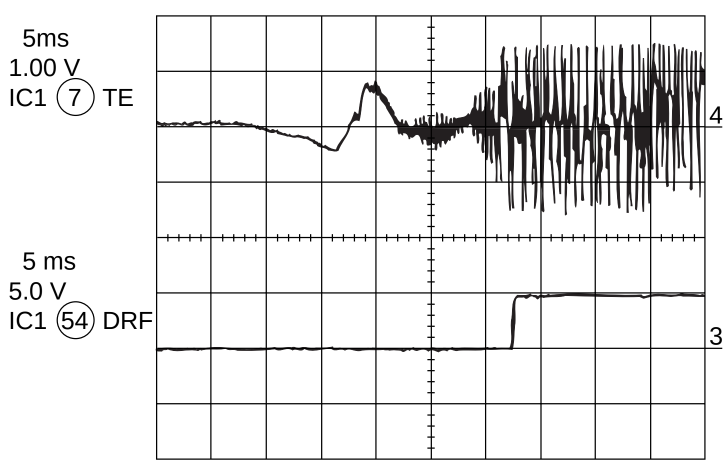


Figure 39-3

• Checking the spin system.

Play operation is performed without disc.

↓ Yes

The turntable rotates a little. → Yes → The spin driver circuit is normal.

↓ No

The turntable fails to rotate or rotates at high speed. → Yes → Check the periphery of IC1 pins 23 to 27, pin 39, and pin 40, IC2 pin 12 and pin 13, IC5 to CNP3.

• Checking the VCO-PLL system

Play operation is performed when disc exits.

↓ Yes

Although HF waveform is normal, TOC data cannot be read. → Yes → Check PDO waveform (Fig. 40).

↓ Abnormal

Check the IC1 pins 43 and 44, IC2 pins 3, 5, 7, 10, and 11.

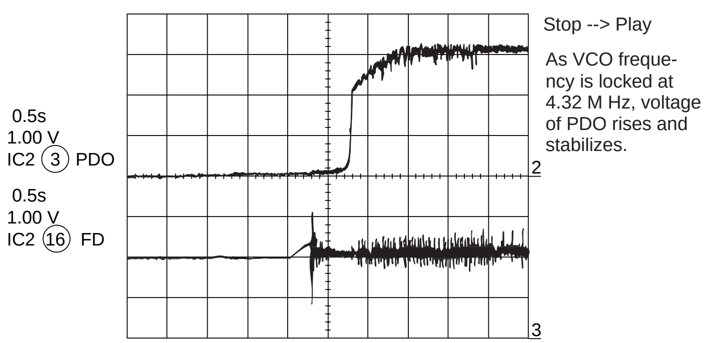


Figure 40

• Although HF waveform is normal and the time indication is normal, no sound is emitted.

Check IC 2 pin 48 (EFLG). → No → Usually, the number of pulses of flawless disc is 100 pulses/sec or less.

↓ Yes

Check IC2 pins 37, 40.

↓ Abnomal

Check IC 401 and POWER AMP IC 801.

FUNCTION TABLE OF IC

IC1 VHiLA9241M/-1: Servo Amp. (LA9241M) (1/2)

Pin No.	Port Name	Function
1	FIN2	Connection pin for photodiode of pickup. RF signal is generated through addition with FIN pin, and FE signal is generated through subtraction.
2	FIN1	Connection pin for photodiode of pickup.
3	E	Connection pin for photodiode of pickup. TE signal is generated through subtraction with F pin.
4	F	Connection pin for photodiode of pickup.
5	TB	Pin for input of DC component of TE signal.
6	TE-	Pin to connect gain setting resistor of TE signal to TE signal.
7	TE	TE signal output pin.
8	TESI	TES (Track error sense) comparator input pin. TE signal is band-passed and input.
9	SCI	Input pin for shock detection.
10	TH	Pin to set time constant of tracking gain.
11*	TA	TA amplifier output pin.
12	TD-	Pin to compose tracking phase compensation constant between TD and VR pins.
13	TD	Pin to set tracking phase compensation.
14	JP	Pin to set amplitude of tracking jump signal (kick pulse).
15	TO	Tracking control signal output pin.
16	FD	Focusing control signal output pin.
17	FD-	Pin to compose focusing phase compensation constant between FD and FA pins.
18	FA	Pin to compose focusing phase compensation constant between FD-/FA-pins.
19	FA-	Pin to compose focusing phase compensation constant between FA and FE pins.
20	FE	Output pin of FE signal.
21	FE-	Pin to connect gain setting resistor of FE signal across TE pin.
22	AGND	GND for analog signal.
23	NC	No connect.
24	SPI	Spindle amplifier input.
25	SPG	Pin to connect gain setting resistor in the 12cm mode of spindle.
26	SP-	Pin to connect spindle phase compensation constant together with SPD pin.
27	SPD	Spindle control signal output pin.
28	SLEQ	Pin to connect thread phase compensation constant.
29	SLD	Thread control signal output pin.
30	SL-	Input pin of thread feed signal from micro computer.
31	SL+	Input pin of thread feed signal from micro computer.
32	JP-	Input pin of tracking jump signal from DSP.
33	JP+	Input pin of tracking jump signal from DSP.
34	TGL	Input pin of tracking gain control signal from DSP. TGL = Gain low at "H"
35	TOFF	Input pin of tracking off control signal from DSP. TOFF = Off at "H"
36	TES	Output pin of TES signal to DSP.
37	HFL	(HIGH FREQUENCY LEVEL) is used to judge whether main beam is positioned on the bit or on the mirror.
38	SLOF	Thread servo off control input pin.
39	CV-	Pin to input CLV error signal from DSP.
40	CV+	Pin to input CLV error signal from DSP.
41	RFSM	RF output pin.
42	RFS-	Pin to set gain of RF and set 3T compensation constant together with RFSM pin.
43	SLC	(SLICE LEVEL CONTROL) is the output pin to control of the level of the data slice with RF waveform DSP.
44	SLI	Input pin to control the level of data slice with DSP.
45	DGND	GND pin in the digital system.
46	FSC	Output pin for focus search smoothening capacitor.
47	TBC	(Tracking Balance Control) Pin to set EF balance variable range.
48*	NC	No connect.
49	DEF	Defect detection output pin of disk.
50	CLK	Reference clock input pin. 4.23MHz of DSP is input.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC1 VHiLA9241M/-1:Servo Amp. (LA9241M) (2/2)

Pin No.	Port Name	Function
51	CL	Micro computer command clock input pin.
52	DAT	Micro computer command data input pin.
53	CE	Micro computer command chip enable input pin.
54	DRF	(DETECT RF) RF level detection output.
55	FSS	(Focus Serch Select) Pin to switch focus search mode. (± search/+ search for reference voltage)
56	VCC2	VCC pin for servo system and digital system.
57	REFI	Pin to connect pass control for reference voltage.
58	VR	Reference voltage output pin.
59	LF2	Pin to set defect detection time constant of disk.
60	PH1	Pin to connect capacitor for peak hold of RF signal.
61	BH1	Pin to connect capacitor for bottom hold of RF signal.
62	LDD	APC circuit output pin.
63	LDS	APC circuit output pin.
64	VCC1	RF system VCC pin.

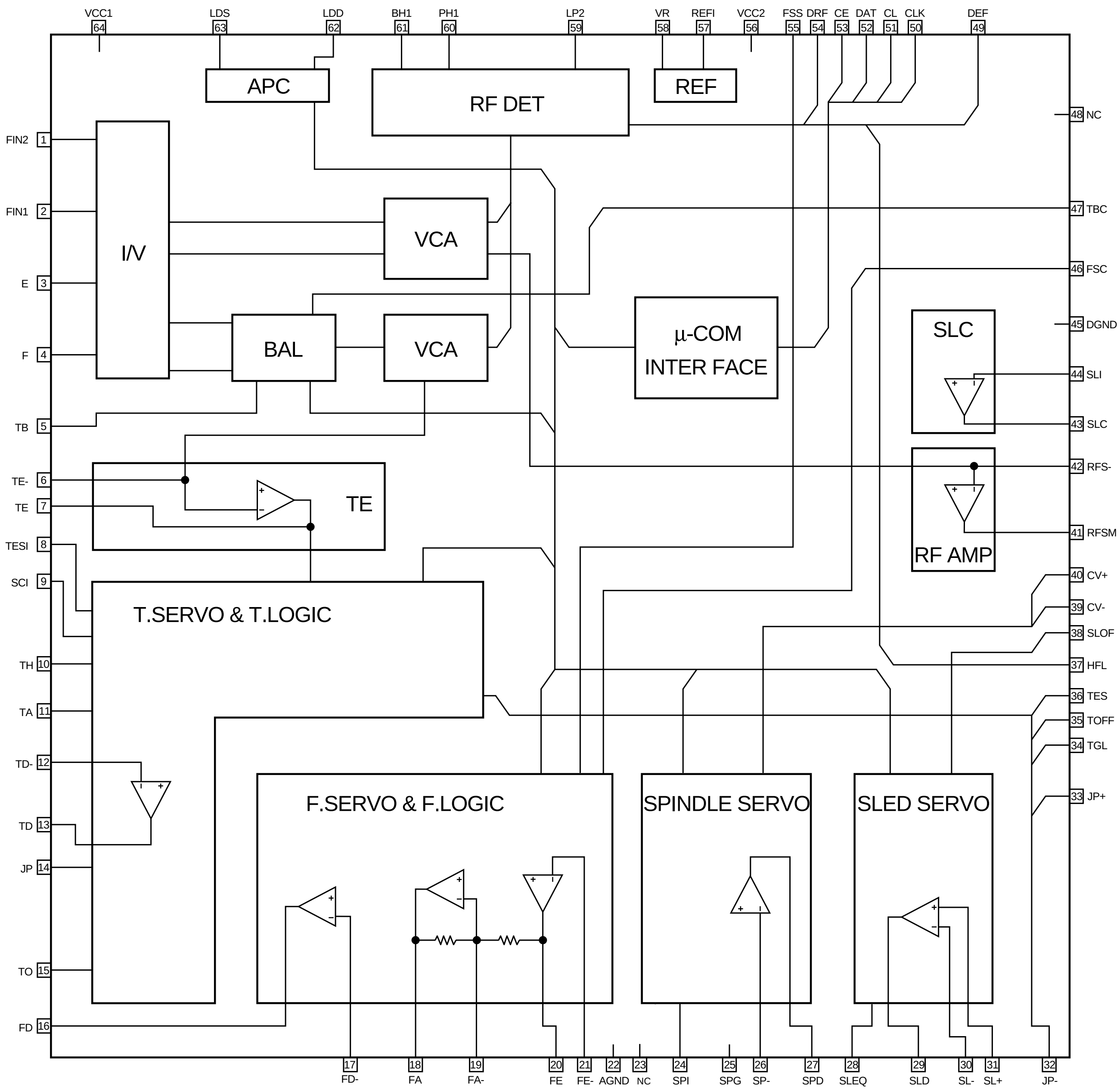


Figure 42 BLOCK DIAGRAM OF IC

IC2 VHiLC78622N-1: Servo/Signal Control (LC78622N) (1/2)

Pin No.	Terminal Name	Input/Output	Function	
1	DEFI	Input	Defect detection signal (DFF) input terminal. (When this terminal is not used, connect it to 0V.)	
2	TAI	Input	For PLL	Input terminal for test. Pull-down resistor built in. Be sure to connect this terminal to 0V.
3	PDO	Output		Phase comparison output terminal for external VCO control.
4	VVSS	—		Grounding terminal for built-in VCO. Be sure to connect this terminal to 0V.
5	ISET	Input		Resistor connection terminal for adjustment of PDO output current.
6	VVDD	—		Power terminal for built-in VCO.
7	FR	Input		For VCO frequency range adjustment.
8	VSS	—	Digital system grounding terminal. Be sure to connect this terminal to 0V.	
9	EFMO	Output	For slice level control	EFM signal output terminal.
10	EFMIN	Input		EFM signal input terminal.
11	TEST2	Input	Input terminal for test. Pull-down resistor built-in. Be sure to connect this terminal to 0V.	
12	CLV+	Outout	Output for disc motor control. 3-value output is enabled according to command.	
13	CLV-	Output	Output for disc motor control. 3-value output is enabled according to command.	
14	V/$\overline{P}$	Output	Rough servo/phase control automatic selection monitor output terminal. "H": Rough servo, "L": Phase servo	
15	HLF	Intput	Track detection signal input terminal. Schmidt input.	
16	TES	Input	Tracking error signal input terminal. Schmidt input.	
17	TOFF	Output	Tracking OFF output terminal.	
18	TGL	Output	Output terminal for tracking gain selection. "L": Gain raising.	
19	JP+	Output	Output for track jump control. 3-value output is enabled according to command.	
20	JP-	Output	Output for track jump control. 3-value output is enabled according to command.	
21*	PCK	Output	Clock monitor terminal for EFM data play-back. Phase lock: 4.3218 MHz.	
22*	FSEQ	Output	Sync signal detection output terminal. When the sync signal detected from the EFM signal coincides with the internally generated sync signal: "H"	
23	VDD	—	Digital system power terminal.	
24	CONT1	Input/Output	General-use input/output terminal 1.	Control with serial data command from microcomputer. When this terminal is not used, set it as an input terminal and connect to 0V or set it as an output terminal and open.
25	CONT2	Input/Output	General-use input/output terminal 2.	
26	CONT3	Input/Output	General-use input/output terminal 3.	
27	CONT4	Input/Output	General-use input/output terminal 4.	
28*	CONT5	Input/Output	General-use input/output terminal 5.	
29*	EMPH/CONT6	Output	Deemphasis monitor terminal. "H": Deemphasis disc play-back. General-use output terminal 6.	
30*	C2F	Output	C2 flag output terminal.	
31	DOUT	Output	Digital OUT output terminal. (EIAJ format)	
32*	TEST3	Input	Input terminal for test. Pull-down resistor built-in. Be sure to connect this terminal to 0V.	
33	TEST4	Input	Input terminal for test. Pull-down resistor built-in. Be sure to connect this terminal to 0V.	
34	PCCL	Input	General-use input/output command recognition terminal. Pull-down resistor built in. When this terminal is used for the same function as that of LC78622E, open or connect this terminal to 0V. H: Only the general-use input/output port command is controllable. L: All command controls are enabled.	
35*	MUTEL/CONT7	Output	L channel 1-bit DAC	Mute output terminal for L channel. General-use output terminal 7.
36	LVDD	—		Power terminal for L channel.
37	LCHO	Output		L channel output terminal.
38	LVSS	—		Grounding terminal for L channel. Be sure to connect this terminal to 0V.
39	RVSS	—	R channel 1-bit DAC	Grounding terminal for R channel. Be sure to connect this terminal to 0V.
40	RCHO	Output		R channel output terminal.
41	RVDD	—		Power terminal for R channel.
42*	MUTER/CONT8	Output		Mute output terminal for R channel. General-use output terminal 8.
43	XVDD	—	Power terminal for crystal oscillation.	
44	XOUT	Output	16.9344 MHz crystal oscillator connection terminal.	
45	XIN	Input	16.9344 MHz crystal oscillator connection terminal.	
46	XVSS	—	Grounding terminal for crystal oscillation. Be sure to connect this terminal to 0V.	

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC2 VHiLC78622N-1: Servo/Signal Control (LC78622N) (2/2)

Pin No.	Terminal Name	Input/Output	Function
47*	SBSY	Output	Sub-code clock sync signal output terminal.
48*	EFLG	Output	C1, C2, single, double correction monitor terminal.
49*	PW	Output	Sub-code P, Q, R, S, T, U, and W output terminal.
50*	SFSY	Output	Sub-code frame sync signal output terminal. Falling occurs when the sub-code is in standby state.
51	SBCK	Input	Sub-code read clock input terminal. Schmidt input (When this terminal is not used, connect it to 0V.)
52*	FSX	Output	7.35 kHz sync signal (frequency-divided from crystal oscillation) output terminal.
53	WRQ	Output	Sub-code Q output standby output terminal.
54	RWC	Input	Read/Write control input terminal. Schmidt input.
55	SQOUT	Output	Sub-code Q output terminal.
56	COIN	Input	Command input terminal from microcomputer.
57	$\overline{\text{CQCK}}$	Input	Command input taking-in clock or sub-code taking-out (from SQOUT) clock input terminal. Schmidt input
58	$\overline{\text{RES}}$	Input	LSI resetting input terminal. When power is turned on, once "L" is set.
59*	TEST11	Output	Output terminal for test. Use this terminal in open state (usually "L" output).
60*	16M	Output	16.9344 MHz output terminal.
61	4.2M	Output	4.2336 MHz output terminal.
62	TEST5	Input	Input terminal for test. Pull-down resistor built-in. Be sure to connect this terminal to 0V.
63	$\overline{\text{CS}}$	Input	Chip selection input terminal. Pull-down resistor built-in. In noncontrol state connect this terminal to 0V.
64	TEST1	Input	Input terminal for test. Pull-down resistor is not provided. Be sure to connect this terminal to 0V.

Note: The same potential must be supplied to the power terminals (VDD, VVDD, LVDD, RVDD, XVDD).

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

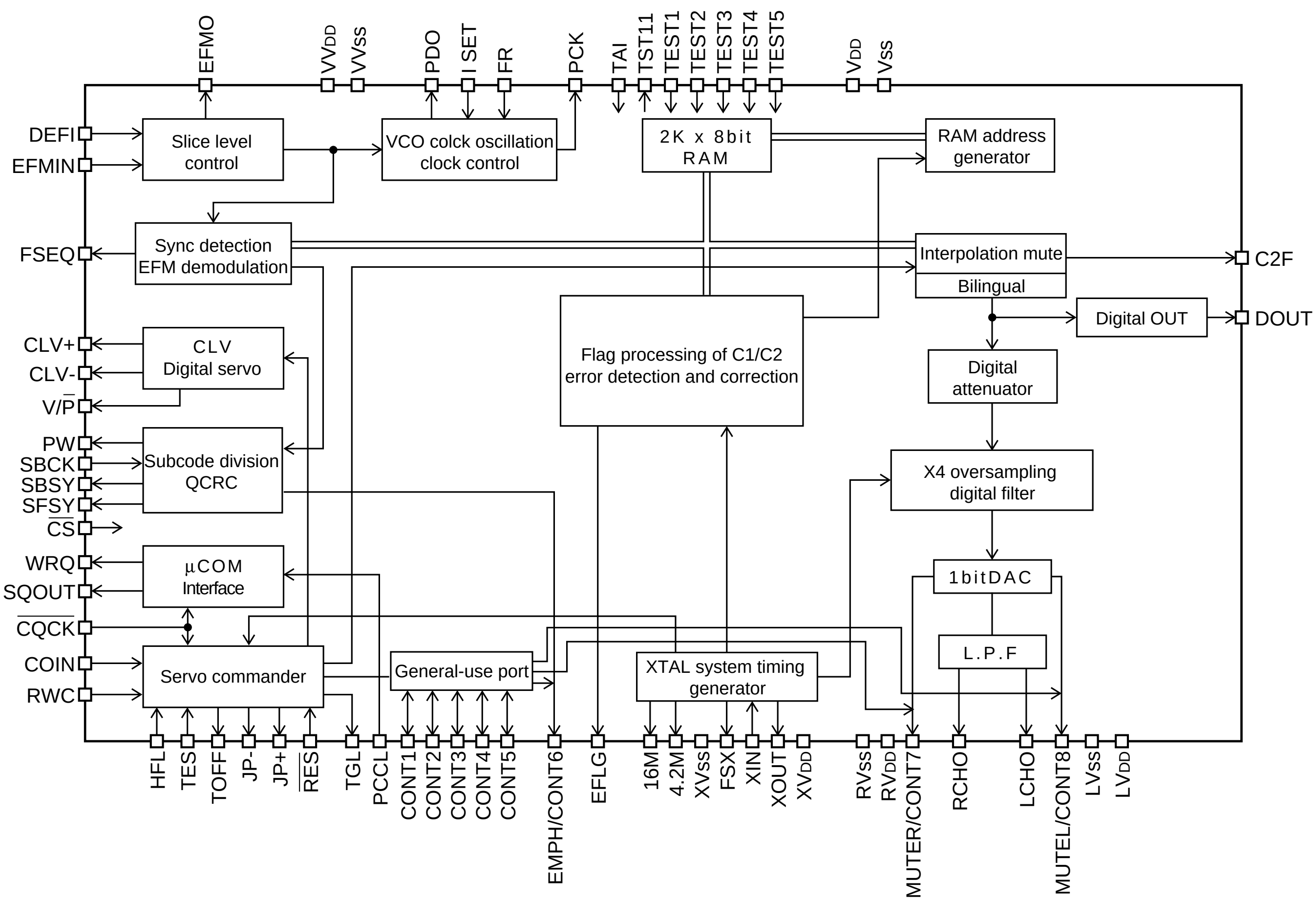
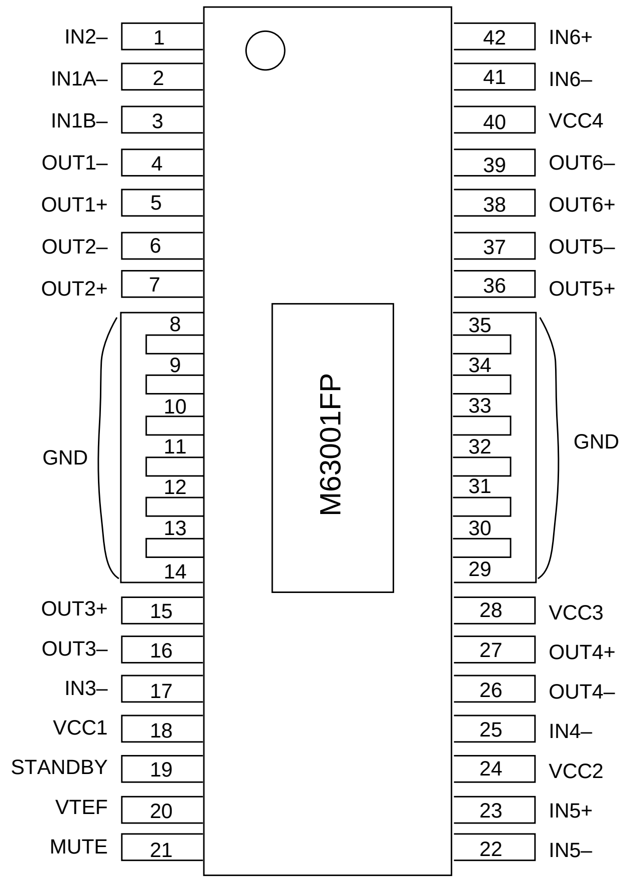


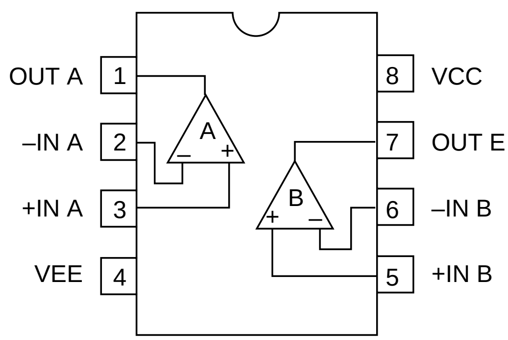
Figure 44 BLOCK DIAGRAM OF IC

IC3 VHiM63001FP-1: Focus/Tracking/Spin/Slide Driver (M63001FP)

Pin No.	Terminal Name	Function
1	IN2-	CH2 inverted input.
2	IN1A-	CH1 inverted input.
3	IN1B-	CH1 output offset control.
4	OUT1-	CH1 inverted output.
5	OUT1+	CH1 non-inverted output.
6	OUT2-	CH2 inverted output.
7	OUT2+	CH2 non-inverted output.
8-14	GND	GND
15	OUT3+	CH3 non-inverted output.
16	OUT3-	CH3 inverted output.
17	IN3-	CH3 inverted input.
18	VCC1	Power supply 1 (CH1, CH2, CH3)
19	STANDBY	STANDBY signal input.
20	VRFE	CH1-CH4 Reference voltage input.
21	MUTE	Mute signal input (CH6).
22	IN5-	CH5 inverted input.
23	IN5+	CH5 non-inverted input.
24	VCC2	Power supply 2 (CH4).
25	IN4-	CH4 inverted input.
26	OUT4-	CH4 inverted output.
27	OUT4+	CH4 non-inverted output.
28	VCC3	Power supply 3 (CH5).
29-35	GND	GND
36	OUT5+	CH5 non-inverted output.
37	OUT5-	CH5 inverted output.
38	OUT6+	CH6 non-inverted output.
39	OUT6-	CH6 inverted output.
40	VCC4	Power supply 4 (CH6).
41	IN6-	CH6 inverted input.
42	IN6+	CH6 non-inverted input.



IC562,563 VHiKiA4558P-1: Ope Amp. (KIA4558P)



IC601 VHiM62439SP-1: Audio Processor (M62439SP)

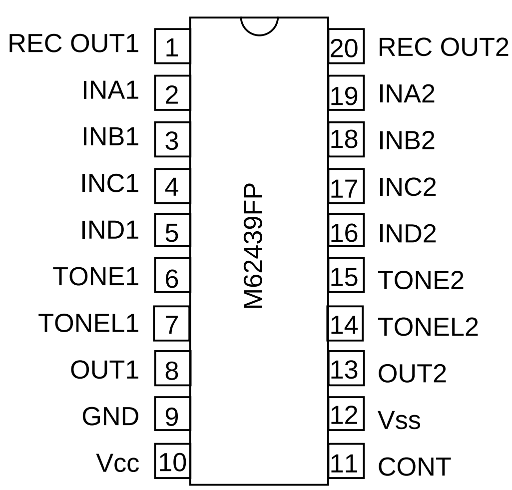


Figure 45 BLOCK DIAGRAM OF IC

IC701 RH-iX0301AWZZ:System Microcomputer (IX0301AW) (1/2)

Pin No.	Port Name	Terminal Name	Input/Output	Function
1	VDD	VDD	—	(+) POWER SUPPLY
2*	P37	ENA	Output	DOLBY PROLOGIC ENABLE TERMINAL
3	P36	DO	Input	DATA INPUT
4	P35	DI	Output	DATA OUTPUT
5	P34	CE	Output	CE OUTPUT
6	P33	CLK	Output	CLOCK OUTPUT
7,8	P32, P31	LCK1, LCK2	Output	
9	P30	RWC	Output	CD DSP READ WRITE CONTROL
10	RESET	RESET	Input	RESET
11	X2	X2	Output	MAIN CLOCK
12	X1	X1	Input	MAIN CLOCK
13	Vpp	VPP	—	POWER SUPPLY TERMINAL
14*	XT2	XT2	—	OPEN
15	P04	WRQ	Input	CD DSP WRITE REQUEST
16	VDD	VDD	—	(+) POWER SUPPLY
17	P27	PCCL	Output	CD DSP PCCL
18	P26	COIN	Outout	CD DSP COMAND
19	P25	SQOUT	Input	CD DSP CODE Q OUT
20	P24	CQCK	Output	CD DSP CLOCK
21	P23	DSP RES	Output	CD DSP RESET
22	P22	FRF (DRF)	Input	CD RF LEVEL DETECTION
23	P21	SLD+	Output	CD SLIDE MOTOR +
24	P20	SLD-	Output	CD SLIDE MOTOR -
25	AVss	AVSS	—	ANALOG GROUND
26	ANI7	SPEANA3	Input	SPEANA DATA INPUT 16 KHz
27	ANI6	SPEANA2	Input	SPEANA DATA INPUT 1 KHz
28	ANI5	SPEANA1	Input	SPEANA DATA INPUT 63 Hz
29*	ANI4	TUN SM	Input	TUNER SIGNAL METER INPUT
30	ANI3	T2 RUN	Input	TAPE2 RUN PULSE INPUT
31-33	ANI2-ANI0	KEYIN3-KEYIN1	Input	KEY INPUT
34	AVDD	AVDD	—	ANALOG VDD
35	AVREF	AVREF	—	ANALOG REF VOLTAGE
36	P03	PUIN SW	Input	CD PUIN SWITCH
37	P02	O/C SW	Input	CD OPEN/CLOSE SWITCH
38	INTP1	SYS STOP	Input	SYSTEM STOP INPUT
39	INTP0	REMOCON	Input	REMOCON INPUT
40	Vss	VSS	—	GROUND VOLTAGE
41	P74	DNO SW	Input	CD DISC NO. SWITCH
42	P73	U/D SW	Input	CD UP/DOWN SWITCH
43	P72	TIMER LED	Output	TIMER LED CONTROL
44	P71	T_SOL	Output	TAPE SOLENOID CONTROL
45	P70	T_MOT	Output	TAPE MOTOR CONTROL
46	VDD	VDD	—	(+) POWER SUPPLY
47	P127	CAM SW	Input	TAPE CAM SWITCH
48	P126	TIFAS	Input	TAPE1 FULL AUTOSTOP PULSE INPUT
49	P125	FPA	Input	TAPE2 A-SIDE FULL PROOF
50	P124	H/P	Input	HEADPHONE INPUT
51	P123	AC RLY_CONT	Output	AC RELAY CONTROL
52	P122	REC/PLAY	Output	TAPE REC/PLAY CHANGE
53	P121	T_BIAS	Output	TAPE Record bias control
54	P120	T_T1T2	Output	TAPE T1/T2 CHANGE
55	P117	DISTO	Input	DISTINATION INPUT

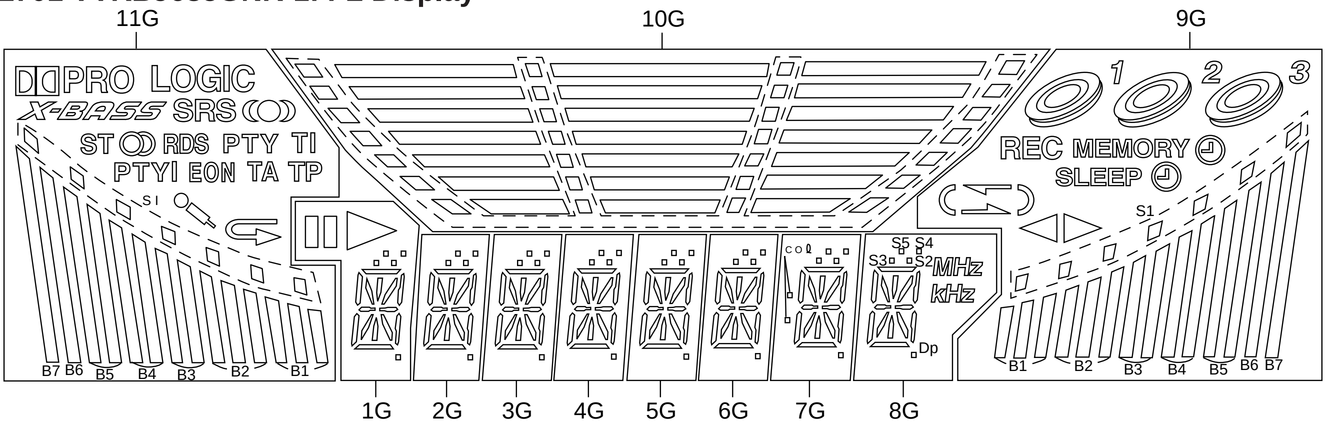
In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

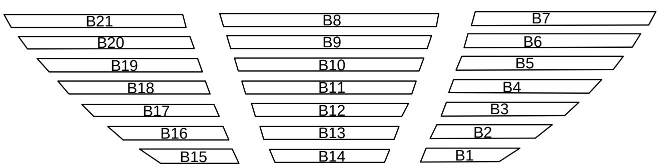
IC701 RH-iX0301AWZZ:System Microcomputer (IX0301AW) (2/2)

Pin No.	Port Name	Terminal Name	Input/Output	Function
56	P116	KEY JOG A	Input	KEY JOG INPUT A
57	P115	KEY JOG B	Input	KEY JOG INPUT B
58	P114	S MUTE	Output	SYSTEM MUTE
59*	P113	C MUTE	Output	CENTER MUTE
60*	P112	SR MUTE	Output	SURROUND MUTE
61	P111	HI-CUT	Output	HI-CUT OUTPUT
62*	P110	POWER	Output	POWER OUTPUT
63	P107	SP_RLY	Output	SPEAKER OUTPUT RELAY CONTROL
64	P106	SP_DET	Input	SPEAKER OUTPUT DETECTION
65	P105	SPN_P	Input	TUNER SPAN CHANGE
66	P104	DISTOUT	Output	DISTINATION OUTPUT
67	P103/FIP32	DIAT4/P22	Input/Output	FL DISPLAY SEGMENT DRIVER DISTINATION INPUT
68	P102/FIP31	DIAT3/P21	Input/Output	FL DISPLAY SEGMENT DRIVER DISTINATION INPUT
69	P101/FIP30	DIAT2/P20/P15	Input/Output	FL DISPLAY SEGMENT DRIVER DISTINATION INPUT
70	P100/FIP29	DIAT1/P19/P16	Input/Output	FL DISPLAY SEGMENT DRIVER DISTINATION INPUT
71-78	FIP28-FIP21	P18/P13-P11/P7	Output	FL DISPLAY SEGMENT DRIVER
79	VLOAD	VLOAD	—	FL DRIVER (–) POWER SUPP, –30V
80-100	FIP20-FIP0	P10/P6-G1/9G	Output	FL DISPLAY SEGMENT DRIVER

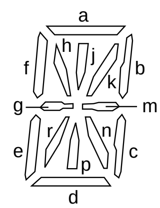
In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

FL701 VVKBJ685GNK-1: FL Display





[10G]



[1G~8G]

ANODE CONNECTION

	1G	2G~6G	7G	8G	9G	10G	11G
P1	Dp	Dp	Dp	Dp	S1	S1	S1
P2	d	d	d	d	B1	B1	B1
P3	c	c	c	c	B2	B2	B2
P4	n	n	n	n	B3	B3	B3
P5	p	p	p	p	B4	B4	B4
P6	r	r	r	r	B5	B5	B5
P7	e	e	e	e	B6	B6	B6
P8	m	m	m	m	B7	B7	B7
P9	g	g	g	g	◎1	B8	PRO LOGIC
P10	–	–	c o ℓ	–	◎2	B9	X-BASS
P11	b	b	b	b	◎3	B10	SRS
P12	k	k	k	k	REC	B11	ST
P13	j	j	j	j	MEMORY	B12	◯◯
P14	h	h	h	h	◷	B13	RDS
P15	f	f	f	f	◷ (LOWER)	B14	PTY
P16	a	a	a	a	SLEEP	B15	TI
P17	S2	S2	S2	S2	(	B16	TP
P18	S3	S3	S3	S3	⇄	B17	TA
P19	S4	S4	S4	S4	)	B18	PTYI
P20	S5	S5	S5	S5	◁	B19	EON
P21	▷	–	–	MHz	▷	B20	🎤
P22	‖	–	–	kHz	–	B21	↪

Figure 48 FL DISPLAY

SHARP PARTS GUIDE

MODEL CD-C662

CD-C662 mini component system consisting of CD-C662 (Main unit) and CP-C662 and (Speaker system).

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. No.
3. PART NO.
4. DESCRIPTION

★ MARK: SPARE PARTS-DELIVERY SECTION

For U.S.A. only

Contact your nearest SHARP Parts Distributor to order.

For location of SHARP Parts Distributor,
Please call Toll-Free;
1-800-BE-SHARP

Explanation of capacitors/resistors parts codes

Capacitors

VCC .... Ceramic type
VCK........................ Ceramic type
VCT........................ Semiconductor type
VC • • MF .... Cylindrical type (without lead wire)
VC • • MN............... Cylindrical type (without lead wire)
VC • • TV................ Square type (without lead wire)
VC • • TQ .... Square type (without lead wire)
VC • • CY .... Square type (without lead wire)
VC • • CZ .... Square type (without lead wire)
VC • • • • • • • • • J .. The 13th character represents capacity difference. ("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%, "C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD .... Carbon-film type
VRS........................ Carbon-film type
VRN .... Metal-film type
VR • • MF .... Cylindrical type (without lead wire)
VR • • MN............... Cylindrical type (without lead wire)
VR • • TV................ Square type (without lead wire)
VR • • TQ .... Square type (without lead wire)
VR • • CY .... Square type (without lead wire)
VR • • CZ .... Square type (without lead wire)
VR • • • • • • • • • J .. The 13th character represents error. ("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

NOTE:

Parts marked with "⚠" are important for maintaining the safety of the set.
Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

CD-C662

INTEGRATED CIRCUITS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
IC1	VHILA9241M/-1	J	AS	Servo Amp.,LA9241M
IC2	VHILC78622N-1	J	AY	Servo/Signal Control,LC78622N
IC3	VHIM63001FP-1	J	AX	Focus/Trackig/Spin/Slide Driver, M63001FP
IC101	VHIAN7345K/-1	J	AM	Playback and Record/Playback Amp.,AN7345K
IC301	VHITA7358AP-1	J	AG	FM Front End,TA7358AP
IC302	VHILC72131/-1	J	AP	PLL (Tuner),LC72131
IC303	VHILA1805//-1	J	AM	FM/AM IF MPX.,LA1805
IC562,563	VHIKIA4558P-1	J	AC	Ope Amp.,KIA4558P
IC601	VHIM62439SP-1	J	AG	Audio Processor,M62439SP
IC701	RH-IX0301AWZZ	J		System Control Microcomputer, IX0301AW
IC702,703	VHIBU2092F/-1	J	AM	Input/Output Expander,BU2092F
IC704	VHIKIA7042AP1	J	AC	Reset,KIA7042AP
IC901	VHISTK4113E-1	J	BL	Power Amp.,STK4113E

TRANSISTORS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
Q1	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q51	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q52	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q103~106	VSKTC3200GR-1	J	AC	Silicon,NPN,KTC3200 GR
Q107,108	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q109	VS2SA1318//-1	J	AC	Silicon,PNP,2SA1318
Q110,111	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q113,114	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q121,122	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q124	VS2SA1015GR-1	J	AB	Silicon,PNP,2SA1015 GR
Q126	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q128	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q302	VS2SC535-C/-1	J	AC	Silicon,NPN,2SC535 C
Q343	VSKRA109M//-1	J	AC	Digital,PNP,KRA109 M
Q344	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
Q601~604	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q702	VSKTA1273Y/-1	J	AE	Silicon,PNP,KTA1273 Y
Q703	VSKTA1271Y/-1	J	AC	Silicon,PNP,KTA1271 Y
Q704	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q705~707	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q801	VHIAN78L05/-1	J	AE	Constant Voltage Regulator, AN78L05
Q802	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q803	VSKTA1274Y/-1	J	AE	Silicon,PNP,KTA1274 Y
Q850	VSKTD2058Y/-1	J		Silicon,NPN,KTD2058 Y
Q851	VHIKIA7812P-1	J	AE	Voltage Regulator,KIA7812P
Q852	VHIKIA7806P-1	J	AG	Voltage Regulator,KIA7806P
Q853	VHIKIA78L05-1	J	AF	Voltage Regulator,KIA78L05
Q901~904	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q905	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q907~909	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q910,911	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M

DIODES

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
D1	VHD1SS133//-1	J	AA	Silicon,1SS133
D81,82	VHD1SS133//-1	J	AA	Silicon,1SS133
D91~93	VHD1SS133//-1	J	AA	Silicon,1SS133
D101,102	VHD1SS133//-1	J	AA	Silicon,1SS133
D301~305	VHD1SS133//-1	J	AA	Silicon,1SS133
D342	VHD1SS133//-1	J	AA	Silicon,1SS133
D551	VHD1SS133//-1	J	AA	Silicon,1SS133
D554~556	VHD1SS133//-1	J	AA	Silicon,1SS133
D601,602	VHD1SS133//-1	J	AA	Silicon,1SS133
D703	VHD1SS133//-1	J	AA	Silicon,1SS133
D705	VHD1SS133//-1	J	AA	Silicon,1SS133
D714~720	VHD1SS133//-1	J	AA	Silicon,1SS133
D801	VHD1SS133//-1	J	AA	Silicon,1SS133
D802~805	VHD1N4004S/-1	J	AB	Silicon,1N4004S
D806~808	VHD1SS133//-1	J	AA	Silicon,1SS133
⚠ D809	VHDTS6B04GM-1	J	AP	Silicon,TS6B04GM
D810	VHDBR102J02-1	J	AM	Silicon,BR102J02
D811~817	VHD1N4004S/-1	J	AB	Silicon,1N4004S
D850~853	VHD1SS133//-1	J	AA	Silicon,1SS133
D901,902	VHD1N4004S/-1	J	AB	Silicon,1N4004S
D903,904	VHD1SS133//-1	J	AA	Silicon,1SS133
D905,906	VHD1N5402M/-1	J	AE	Silicon,1N5402M
D907~913	VHD1SS133//-1	J	AA	Silicon,1SS133
LED701	VHPL1154GT4-1	J	AB	LED,Green,L1154GT4
LED702	VHPSLI342YCB1	J	AC	LED,Orange,SLI342YCB
LED703	VHPSLI342DCB1	J	AC	LED,Yellow,SLI342DCB
LED704	VHPSLI342UCB1	J	AC	LED,Red,SLI342UCB
LED705	VHPSLI342DCB1	J	AC	LED,Orange,SLI342UCB
LED706	VHPSLI342YCB1	J	AC	LED,Yellow,SLI342YCB
LED707	VHPL1154GT4-1	J	AB	LED,Green,L1154GT4
LED716,717	VHPSLI342YCJ1	J	AC	LED,Yellow,SLI342YCJ
LED718	VHPSLI325YC-1	J	AB	LED,Yellow,SLI325YC
LED719,720	VHPSLI342YCE1	J	AC	LED,Yellow,SLI342YCE
LED721	VHPSLI342YCJ1	J	AC	LED,Yellow,SLI342YCJ
LED722	VHPSLI342UCJ1	J	AC	LED,Red,SLI342UCJ
LED723,724	VHPSLI342YCJ1	J	AC	LED,Yellow,SLI342YCJ
VD302,303	VHCSVC211C/-1	J	AG	Silicon,SVC211C,Variable Cap
VD331	VHCSVC348S/-1	J	AK	Variable Capacitance,SVC348S
ZD61	VHEMTZJ5R6B-1	J	AD	Zener,5.6V,MTZJ5.6B
ZD351	VHEMTZJ5R1B-1	J	AC	Zener,5.1V,MTZJ5.1B
ZD551	VHEMTZJ6R2C-1	J	AC	Zener,6.2V,MTZJ6.2C
ZD601,602	VHEMTZJ2R4B-1	J	AB	Zener,2.4V,MTZJ2.4B
ZD801	VHEMTZJ300C-1	J	AC	Zener,30V,MTZJ30C
ZD802	VHEMTZJ6R2A-1	J	AA	Zener,6.2V,MTZJ6.2A
ZD901,902	VHEMTZJ8R2C-1	J	AB	Zener,8.2V,MTZJ8.2C
ZD951	VHEMTZJ130B-1	J	AC	Zener,13V,MTZJ13B

FILTERS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
BF301	RFILR0008AWZZ	J	AE	Band Pass Filter
CF301	RFILF0124AFZZ	J	AD	FM IF,10.7 MHz
CF351	92LFILTA1768A	J	AE	AM IF

TRANSFORMERS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
T301	RCILI0017AWZZ	J	AB	FM IF
T331	RCILA0052AWZZ	J	AE	AM Antenna
T333	RCILB0058AWZZ	J	AC	OSC,AM
T351	RCILI0015AWZZ	J	AE	AM IF
T352	RCILI0016AWZZ	J	AC	FM Detection
⚠ T801	RTRNP0245AWZZ	J	BM	Power
⚠ T802	RTRNP0239AWZZ	J	AP	Power

COILS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
L61	VP-XHR82K0000	J	AC	0.82 µH
L99	VP-DH2R2K0000	J	AB	2.2 mmH,Peaking
L103	VP-DH101K0000	J	AB	100 µH,Choke
L104	VP-MK331K0000	J	AB	330 µH,Choke
L302	RCILR0029AWZZ	J	AA	FM RF
L303	RCILB0060AWZZ	J	AC	OSC,FM
L343	VP-DH101K0000	J	AB	100 µH,Choke
L601	VP-DH2R2K0000	J	AB	2.2 mmH,Peaking
L702	VP-DH101K0000	J	AB	100 µH,Choke
L802	VP-DH101K0000	J	AB	100 µH,Choke
L901,902	RCILZ0137AFZZ	J	AA	0.29 µH

VARIABLE RESISTOR

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
VR351	RVR-M0025AWZZ	J	AC	6.8 kohms (B),Semi-VR [VCO]

VIBRATORS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
X352	RCRSP0002AWZZ	J	AH	Crystal,4.5 MHz
XL1	RCRSP0005AWZZ	J	AF	Crystal,16.934 MHz
XL701	RCRSP0003AWZZ	J	AH	Crystal,4.19 MHz

CAPACITORS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C1	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C2	VCKYTV1HB103K	J	AA	0.01 µF,50V
C3	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C4	VCEAZA1HW104M	J	AB	0.1 µF,50V,Electrolytic
C5,6	VCTYPA1CX333K	J	AA	0.033 µF,16V
C7	VCEAZA1HW104M	J	AB	0.1 µF,50V,Electrolytic
C8	VCTYPA1CX683K	J	AA	0.068 µF,16V
C9	VCTYPA1CX473K	J	AA	0.047 µF,16V
C10	VCCSTV1HL181J	J	AA	180 pF,50V
C11,12	VCTYPA1CX104K	J	AB	0.1 µF,16V
C13	VCKYTV1HB331K	J	AA	330 pF,50V
C14,15	VCKYTV1HB103K	J	AA	0.01 µF,50V
C16	VCKYTV1HB472K	J	AA	0.0047 µF,50V
C17	VCKYTV1HB102K	J	AA	0.001 µF,50V
C18	VCEAZA1HW474M	J	AB	0.47 µF,50V,Electrolytic
C19	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C20	VCEAZA1CW476M	J	AB	47 μF,16V,Electrolytic
C21	VCKYTV1HB332K	J	AA	0.0033 μF,50V
C22	VCCSPA1HL221J	J	AA	220 pF,50V
C23	VCKYTV1HB272K	J	AA	0.0027 μF,50V
C24	VCCSTV1HL2R2C	J	AB	2.2 pF,50V
C25	VCCSTV1HL270J	J	AA	27 pF,50V
C26	VCTYPA1CX333K	J	AA	0.033 μF,16V
C27	VCKYTV1HB102K	J	AA	0.001 μF,50V
C28	VCTYPA1CX104K	J	AB	0.1 μF,16V
C29	VCEAZA1HW475M	J	AB	4.7 μF,50V,Electrolytic
C30	VCEAZA1HW104M	J	AB	0.1 μF,50V,Electrolytic
C31	VCEAZA0JW227M	J	AC	220 μF,6.3V,Electrolytic
C32	VCKYTV1HB103K	J	AA	0.01 μF,50V
C33	VCEAZA1HW474M	J	AB	0.47 μF,50V,Electrolytic
C34	VCEAZA1HW334M	J	AB	0.33 μF,50V,Electrolytic
C35	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
C36	VCEAZA1CW107M	J	AC	100 μF,16V,Electrolytic
C37	VCKZPA1HF223Z	J	AA	0.022 μF,50V
C38	VCKYTV1HB103K	J	AA	0.01 μF,50V
C39,40	VCKZPA1HF473K	J	AA	0.047 μF,50V
C41	VCCSPA1HL120J	J	AA	12 pF,50V
C42	VCCSPA1HL150J	J	AA	15 pF,50V
C43	VCEAZA0JW337M	J	AC	330 μF,6.3V,Electrolytic
C44~47	VCCCTV1HH101J	J	AA	100 pF (CH),50V
C48	VCCSPA1HL101J	J	AA	100 pF,50V
C49	VCCCTV1HH101J	J	AA	100 pF (CH),50V
C50	VCKYTV1EF223Z	J	AA	0.022 μF,25V
C51,52	VCEAZA1CW107M	J	AC	100 μF,16V,Electrolytic
C54	VCKYTV1HB102K	J	AA	0.001 μF,50V
C55	VCEAZA1CW107M	J	AC	100 μF,16V,Electrolytic
C56	VCKYTV1EF223Z	J	AA	0.022 μF,25V
C57	VCKYBT1HB102K	J	AA	0.001 μF,50V
C71,72	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic
C73,74	VCKYTV1HB221K	J	AA	220 pF,50V
C75	VCKYTV1HB102K	J	AA	0.001 μF,50V
C76	VCKZPA1HF223Z	J	AA	0.022 μF,50V
C77	VCEAZA1CW107M	J	AC	100 μF,16V,Electrolytic
C82	VCEAZA1CW107M	J	AC	100 μF,16V,Electrolytic
C83	VCTYBT1EF223Z	J	AA	0.022 μF,25V
C98	VCKZPA1HF223Z	J	AA	0.022 μF,50V
C99	VCEAZA1AW107M	J	AB	100 μF,10V,Electrolytic
C101,102	VCKYMN1HB102K	J	AA	0.001 μF,50V
C103	VCKYPA1HB103K	J	AA	0.01 μF,50V
C105	VCKYBT1HB181K	J	AA	180 pF,50V
C106	VCKYMN1HB181K	J	AA	180 pF,50V
C107,108	VCKYMN1HB102K	J	AA	0.001 μF,50V
C109	VCKZPA1HF473Z	J	AA	0.047 μF,50V
C111~114	VCKYMN1HB331K	J	AA	330 pF,50V
C115,116	VCEAZA1EW476M	J	AB	47 μF,25V,Electrolytic
C117,118	VCTYPA1EX333K	J	AA	0.033 μF,25V
C119,120	VCKYMN1HB561K	J	AA	560 pF,50V
C121,122	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
C127	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C128	VCEAZA1HW335M	J	AB	3.3 μF,50V,Electrolytic
C129,130	VCKYMN1HB471K	J	AA	470 pF,50V
C131,132	VCKYMN1HB102K	J	AA	0.001 μF,50V
C133,134	VCEAZA1EW226M	J	AB	22 μF,25V,Electrolytic
C135,136	VCTYPA1CX823K	J	AB	0.082 μF,16V
C139,140	VCTYMN1CX332K	J	AA	0.0033 μF,16V
C141,142	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
C145	VCEAZA1EW226M	J	AB	22 μF,25V,Electrolytic
C146	VCEAZA1CW227M	J	AC	220 μF,16V,Electrolytic
C150	VCQPKA2AA392J	J	AB	0.0039 μF,100V,Polypropylene
C151	VCQYKA1HM273K	J	AB	0.027 μF,50V,Mylar
C152	VCEAZA1EW476M	J	AB	47 μF,25V,Electrolytic
C153	VCEAZA1CW107M	J	AC	100 μF,16V,Electrolytic
C154	VCEAZA1CW476M	J	AB	47 μF,16V,Electrolytic
C155,156	VCEAZA1HW335M	J	AB	3.3 μF,50V,Electrolytic
C302	VCCCMN1HH100J	J	AA	10 pF (CH),50V
C303	VCTYMN1CY103N	J	AA	0.01 μF,16V
C304	VCCCMN1HH4R7C	J	AA	4.7 pF (CH),50V
C305	VCCCMN1HH150J	J	AA	15 pF (CH),50V
C306	VCCCMN1HH180J	J	AA	18 pF (CH),50V
C307,308	VCTYMN1CX472K	J	AA	0.0047 μF,16V
C309	VCCUMN1HJ4R7D	J	AA	4.7 pF (UJ),50V
C310	VCKYMN1HB102K	J	AA	0.001 μF,50V
C311	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C312	VCKYMN1HB102K	J	AA	0.001 μF,50V
C313	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C314	VCEAZA1CW106M	J	AC	10 μF,16V,Electrolytic
C316	VCKYBT1HB101K	J	AA	100 pF,50V
C317	VCCUMN1HJ3R9K	J	AA	3.9 pF (UJ),50V
C318	VCCCMN1HH220J	J	AA	22 pF (CH),50V
C319	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C320	VCKYPA1HB102K	J	AA	0.001 μF,50V
C330	VCCUMN1HJ8R2D	J	AA	8.2 pF (UJ),50V
C331	VCKZPA1HF473Z	J	AA	0.047 μF,50V
C332,333	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C334	VCCUMN1HJ220J	J	AA	22 pF (UJ),50V
C335	VCCSPA1HL561J	J	AA	560 pF,50V
C337	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic
C338	VCKYMN1HB101K	J	AA	100 pF,50V
C349	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C350	VCEAZA1AW227M	J	AC	220 μF,10V,Electrolytic
C351	VCTYMN1CX222K	J	AA	0.0022 μF,16V
C353	VCTYMN0JY183M	J	AA	0.018 μF,6.3V
C354	VCKYMN1HB221K	J	AA	220 pF,50V
C355~357	VCEAZA1HW335M	J	AB	3.3 μF,50V,Electrolytic
C358	CPU100V1500PJ	J	AC	0.0015 μF,100V, Polypropylene
C359,360	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C361	VCEAZA1CW226M	J	AC	22 μF,16V,Electrolytic
C363,364	VCTYPA1EX153K	J	AA	0.015 μF,25V
C365~367	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
C369	VCEAZA1CW476M	J	AB	47 μF,16V,Electrolytic
C381	VCCCMN1HH120J	J	AA	12 pF (CH),50V
C382	VCCCMN1HH150J	J	AA	15 pF (CH),50V
C383	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C392	VCKYMN1HB102K	J	AA	0.001 μF,50V
C393	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
C395	VCKYMN1HB102K	J	AA	0.001 μF,50V
C551	VCKYMN1HB271K	J	AA	270 pF,50V
C553	VCTYMN1CX272K	J	AA	0.0027 μF,16V
C555,556	VCTYMN1CX682K	J	AA	0.0068 μF,16V
C557	VCKYMN1HB271K	J	AA	270 pF,50V
C559	VCTYMN1CX272K	J	AA	0.0027 μF,16V
C561~563	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C566~568	VCEAZA1HW225M	J	AB	2.2 μF,50V,Electrolytic
C569	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C601~606	VCEAZA1HW475M	J	AB	4.7 μF,50V,Electrolytic
C611,612	VCTYPA1EX333K	J	AA	0.033 μF,25V
C613~615	VCFYDA1HA224J	J	AB	0.22 μF,50V,Polyester
C616	VCCSMN1HL4R7K	J	AA	4.7 pF,50V
C617	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic
C618,619	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C620~622	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic
C623~626	VCKYMN1HB102K	J	AA	0.001 μF,50V
C627	VCEAZA1EW226M	J	AB	22 μF,25V,Electrolytic
C628	VCFYDA1HA224J	J	AB	0.22 μF,50V,Polyester
C629	VCEAZA1EW226M	J	AB	22 μF,25V,Electrolytic
C630	VCKYMN1HB102K	J	AA	0.001 μF,50V
C631,632	VCKYMN1HB391K	J	AA	390 pF,50V
C634,635	VCTYMN1CX822K	J	AA	0.0082 μF,16V
C641	VCKYPA1HB102K	J	AA	0.001 μF,50V
C673	VCKYPA1HB103K	J	AA	0.01 μF,50V
C702	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
C703,704	VCKYMN1HB102K	J	AA	0.001 μF,50V
C705	RC-EZD476AF1C	J	AC	47 μF,16V,Electrolytic
C706	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
C707	VCCSMN1HL150J	J	AA	15 pF,50V
C708	VCCSMN1HL180J	J	AA	18 pF,50V
C709	VCTYBT1EF223Z	J	AA	0.022 μF,25V
C710	VCEAZA1AW227M	J	AC	220 μF,10V,Electrolytic
C711	VCTYMN1CY103N	J	AA	0.01 μF,16V
C712	VCEAZA1HW335M	J	AB	3.3 μF,50V,Electrolytic
C713,714	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C715	RC-EZD476AF1C	J	AC	47 μF,16V,Electrolytic
C716	VCEAZA1EW476M	J	AB	47 μF,25V,Electrolytic
C717	VCTYBT1EF223Z	J	AA	0.022 μF,25V
C718	VCEAZA1EW476M	J	AB	47 μF,25V,Electrolytic
C719	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C720	VCEAZA1HW476M	J	AB	47 μF,50V,Electrolytic
C722	RC-EZD106AF1H	J	AB	10 μF,50V,Electrolytic
C723	VCEAZA1HW104M	J	AB	0.1 μF,50V,Electrolytic
C801	RC-KZ001LAWZZ	J	AB	0.0047 μF,250VAC,Ceramic
C802	VCQYKA1HM473J	J	AB	0.047 μF,50V,Mylar
C803	VCEAZA1EW477M	J	AD	470 μF,25V,Electrolytic
C804	VCEAZA1CW106M	J	AC	10 μF,16V,Electrolytic
C805	VCEAZV0JW228M	J		2200 μF,6.3V,Electrolytic
C809,810	VCFYDA1HA224J	J	AB	0.22 μF,50V,Polyester
C811,812	VCQYKA2AM224K	J		0.22 μF,100V,Mylar
C813,814	VCQYKA1HM473J	J	AB	0.047 μF,50V,Mylar
C815,816	VCEAZA1HW107M	J	AC	100 μF,50V,Electrolytic
C817	VCEAZA1HW227M	J	AC	220 μF,50V,Electrolytic
C818,819	VCEAZA1HW476M	J	AB	47 μF,50V,Electrolytic

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C820	VCEAZA1VW107M	J	AC	100 µF,35V,Electrolytic
C850	VCEAZW1EW338M	J	AG	3300 µF,25V,Electrolytic
C851	VCEAZA1EW226M	J	AB	22 µF,25V,Electrolytic
C852,853	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C854	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C855,856	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C857	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C858,859	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C860	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C901,902	RC-EZ0029AWZZ	J	AN	3300 µF,71V,Electrolytic
C903,904	VCEAEA1VW478M	J		4700 µF,35V,Electrolytic
C911,912	VCCSPA1HL470J	J	AA	47 pF,50V
C913,914	VCCSPA1HL330J	J	AA	33 pF,50V
C915,916	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C917,918	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C919,920	VCEAZV2AW107M	J		100 µF,100V,Electrolytic
C921,922	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C923,924	VCQYKA1HM223J	J	AB	0.022 µF,50V,Mylar
C925	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C929,930	VCQYKA1HM104J	J	AC	0.1 µF,50V,Mylar
C943	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C945	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C951	VCQYKA1HM223J	J	AB	0.022 µF,50V,Mylar
C952	VCEAZA1EW227M	J	AC	220 µF,25V,Electrolytic
C955	VCEAZA1EW226M	J	AB	22 µF,25V,Electrolytic
C956,957	VCEAZV2AW476M	J		47 µF,100V,Electrolytic

RESISTORS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
	VRD-MN2BD000C	J	AA	0 ohm,Jumper,ø1.4×3.5mm,Ivory
	VRS-TV2AB000J	J	AA	0 ohm,Jumper,1.25×2mm,Green
R1	VRS-TV2AB220J	J	AA	22 ohms,1/10W
R2	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R8	VRS-TV2AB153J	J	AA	15 kohms,1/10W
R9	VRS-TV2AB104J	J	AA	100 kohm,1/10W
R10	VRS-TV2AB222J	J	AA	2.2 kohms,1/10W
R11	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R12	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R13	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R14	VRS-TV2AB273J	J	AA	27 kohms,1/10W
R15	VRS-TV2AB123J	J	AA	12 kohms,1/10W
R16	VRS-TV2AB332J	J	AA	3.3 kohms,1/10W
R17	VRS-TV2AB333J	J	AA	33 kohms,1/10W
R18	VRS-TV2AB153J	J	AA	15 kohms,1/10W
R19	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R20	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R21	VRS-TV2AB152J	J	AA	1.5 kohms,1/10W
R22	VRS-TV2AB821J	J	AA	820 ohms,1/10W
R23	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R24	VRS-TV2AB473J	J	AA	47 kohms,1/10W
R25	VRS-TV2AB152J	J	AA	1.5 kohms,1/10W
R26	VRS-TV2AB823J	J	AA	82 kohms,1/10W
R27	VRS-TV2AB393J	J	AA	39 kohms,1/10W
R28	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R29	VRS-TV2AB563J	J	AA	56 kohms,1/10W
R30	VRS-TV2AB682J	J	AA	6.8 kohms,1/10W
R31	VRS-TV2AB122J	J	AA	1.2 kohms,1/10W
R32	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R33	VRS-TV2AB122J	J	AA	1.2 kohms,1/10W
R34	VRS-TV2AB332J	J	AA	3.3 kohms,1/10W
R35,36	VRS-TV2AB224J	J	AA	220 kohms,1/10W
R37	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R38	VRS-TV2AB471J	J	AA	470 ohms,1/10W
R39	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R40	VRS-TV2AB562J	J	AA	5.6 kohms,1/10W
R41,42	VRS-TV2AB473J	J	AA	47 kohms,1/10W
R43	VRS-TV2AB563J	J	AA	56 kohms,1/10W
R44	VRS-TV2AB333J	J	AA	33 kohms,1/10W
R45	VRS-TV2AB472J	J	AA	4.7 kohms,1/10W
R46	VRS-TV2AB561J	J	AA	560 ohms,1/10W
R47	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R50	VRS-TV2AB681J	J	AA	680 ohms,1/10W
R51	VRD-ST2CD335J	J	AA	3.3 Mohms,1/6W
R52	VRS-TV2AB273J	J	AA	27 kohms,1/10W
R53	VRS-TV2AB122J	J	AA	1.2 kohms,1/10W
R54	VRD-ST2CD331J	J	AA	330 ohms,1/6W
R55	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R56	VRS-TV2AB223J	J	AA	22 kohms,1/10W
R57	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R58~60	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R61~63	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R64	VRS-TV2AB220J	J	AA	22 ohms,1/10W
R65	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R66	VRS-TV2AB221J	J	AA	220 ohms,1/10W
R71,72	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
R73,74	VRS-TV2AB104J	J	AA	100 kohm,1/10W
R80,81	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R82,83	VRS-TV2AB122J	J	AA	1.2 kohms,1/10W
R84	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R88,89	VRD-ST2CD122J	J	AA	1.2 kohms,1/6W
R90	VRD-ST2CD221J	J	AA	220 ohms,1/6W
R91	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R93	VRS-TV2AB221J	J	AA	220 ohms,1/10W
R101	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R102	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R103,104	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R105,106	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R107,108	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R109,110	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R111,112	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R113,114	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R115	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R117,118	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R119,120	VRD-ST2CD560J	J	AA	56 ohms,1/6W
R121,122	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R123,124	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R125,126	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R131,132	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R134	VRD-MN2BD683J	J	AA	68 kohms,1/8W
R135,136	VRD-MN2BD183J	J	AA	18 kohms,1/8W
R137	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
R138	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R139,140	VRD-MN2BD561J	J	AA	560 ohms,1/8W
R141,142	VRD-MN2BD560J	J	AA	56 ohms,1/8W
R145,146	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R153,154	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R155	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R156	VRD-ST2CD224J	J	AA	220 kohms,1/6W
R157	VRD-MN2BD224J	J	AA	220 kohms,1/8W
R158	VRD-ST2EE221J	J	AA	220 ohms,1/4W
R160	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R162	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R164	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R166	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R167	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R168	VRD-MN2BD120J	J	AA	12 ohms,1/8W
R169	VRD-MN2BD182J	J	AA	1.8 kohms,1/8W
R170	VRD-ST2CD182J	J	AA	1.8 kohms,1/6W
R171,172	VRD-MN2BD224J	J	AA	220 kohms,1/8W
R173,174	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R175	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R301	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R302	VRD-ST2CD220J	J	AA	22 ohms,1/6W
R303	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R305	VRD-MN2BD820J	J	AA	82 ohms,1/8W
R306	VRD-MN2BD100J	J	AA	10 ohm,1/8W
R311	VRD-MN2BD224J	J	AA	220 kohms,1/8W
R312	VRD-MN2BD681J	J	AA	680 ohms,1/8W
R313	VRD-MN2BD470J	J	AA	47 ohms,1/8W
R314	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R316	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R317	VRD-ST2EE821J	J	AA	820 ohms,1/4W
R320	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R321	VRD-MN2BD121J	J	AA	120 ohms,1/8W
R323	VRD-MN2BD683J	J	AA	68 kohms,1/8W
R347	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R348	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R350	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R352	VRD-MN2BD153J	J	AA	15 kohms,1/8W
R356	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R359	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R360	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R361	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R362	VRD-ST2EE391J	J	AA	390 ohms,1/4W
R365	VRD-ST2EE681J	J	AA	680 ohms,1/4W
R366,367	VRD-ST2CD821J	J	AA	820 ohms,1/6W
R369	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R371~374	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R375	VRD-ST2CD122J	J	AA	1.2 kohms,1/6W
R379	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R380	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R381	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R551	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R553	VRD-ST2CD123J	J	AA	12 kohms,1/6W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R555	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R556	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R558	VRD-ST2CD683J	J	AA	68 kohms,1/6W
R560	VRD-ST2CD474J	J	AA	470 kohms,1/6W
R561	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R562	VRD-MN2BD394J	J	AA	390 kohms,1/8W
R564	VRD-MN2BD394J	J	AA	390 kohms,1/8W
R566	VRD-MN2BD225J	J	AA	2.2 Mohms,1/8W
R567	VRD-MN2BD274J	J	AA	270 kohms,1/8W
R568	VRD-MN2BD224J	J	AA	220 kohms,1/8W
R570	VRD-MN2BD224J	J	AA	220 kohms,1/8W
R572	VRD-MN2BD225J	J	AA	2.2 Mohms,1/8W
R573	VRD-MN2BD564J	J	AA	560 kohms,1/8W
R574,575	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R578~580	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R601~608	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R609	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R610	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R611	VRD-MN2BD331J	J	AA	330 ohms,1/8W
R612	VRD-MN2BD153J	J	AA	15 kohms,1/8W
R613,614	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R615,616	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R617~620	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R623	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R624	VRD-MN2BD331J	J	AA	330 ohms,1/8W
R625	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R626	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R628	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R629,630	VRD-RT2HD561J	J	AA	560 ohms,1/2W
R631,632	VRD-MN2BD822J	J	AA	8.2 kohms,1/8W
R633,634	VRD-MN2BD393J	J	AA	39 kohms,1/8W
R635,636	VRD-MN2BD331J	J	AA	330 ohms,1/8W
R637,638	VRD-ST2CD224J	J	AA	220 kohms,1/6W
R639	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R640	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R641	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R642	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R650,651	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R652,653	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R701~703	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R705~708	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R709~711	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R712	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R713~715	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R716	VRD-ST2CD330J	J	AA	33 ohms,1/6W
R717	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R719,720	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R721~723	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R724	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R726~729	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R730~732	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R733,734	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R735	VRD-ST2CD182J	J	AA	1.8 kohms,1/6W
R736,737	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R738	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R739	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R740~743	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R744,745	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R747,748	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R749,750	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R751	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
R752~754	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R755,756	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R757	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R758	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W
R759,760	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R762~778	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R780	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R781	VRD-MN2BD821J	J	AA	820 ohms,1/8W
R782~785	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R786	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R787	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R795	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R797	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R798	VRD-MN2BD101J	J	AA	100 ohm,1/8W
R799	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R801	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R802	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R803	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R804	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R805	VRD-ST2EE100J	J	AA	10 ohm,1/4W
R850	VRD-RT2HD3R3J	J	AA	3.3 ohms,1/2W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R851	VRD-ST2CD330J	J	AA	33 ohms,1/6W
R852,853	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R854	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R855	VRD-RT2HD3R3J	J	AA	3.3 ohms,1/2W
R901,902	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R903,904	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R905,906	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R907,908	VRD-ST2CD391J	J	AA	390 ohms,1/6W
R909,910	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R911	VRD-ST2CD333J	J	AA	33 kohms,1/6W
⚠ R912,913	VRG-ST2EC101J	J	AB	100 ohm,1/4W,Fusible
R915,916	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R917,918	VRN-VV3LAR10J	J		0.1 ohm,3W
R919,920	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R921,922	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R923	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R925~928	VRD-RT2HD100J	J	AA	10 ohm,1/2W
R929,930	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R931,932	VRD-RT2HD4R7J	J	AA	4.7 ohms,1/2W
R933,934	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R935,936	VRD-RT2HD221J	J	AA	220 ohms,1/2W
R937	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R938	VRD-ST2CD683J	J	AA	68 kohms,1/6W
R939	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R941,942	VRS-VV3DA561J	J	AC	560 ohms,2W
R943	VRS-VV3DA681J	J	AC	680 ohms,2W
R953,954	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
R955,956	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R957	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R958	VRD-ST2CD681J	J	AA	680 ohms,1/6W
R959	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
R960	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R961,962	VRD-ST2CD393J	J	AA	39 kohms,1/6W
RD01	VRD-ST2CD821J	J	AA	820 ohms,1/6W
RD02	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W
RD03	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
RD04	VRD-MN2BD182J	J	AA	1.8 kohms,1/8W
RD05	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
RD06	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
RD07	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
RD09	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
RD10	VRD-MN2BD821J	J	AA	820 ohms,1/8W
RD11	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W
RD12	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
RD13	VRD-ST2CD182J	J	AA	1.8 kohms,1/6W
RD14	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
RD15	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
RD16	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
RD21	VRD-MN2BD821J	J	AA	820 ohms,1/8W
RD22	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W
RD23	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
RD24	VRD-ST2CD182J	J	AA	1.8 kohms,1/6W
RD25	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
RD26	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
RD27	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
RD28	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
RS701~703	VRD-MN2BD102J	J	AA	1 kohm,1/8W
RS704,705	VRD-ST2CD102J	J	AA	1 kohm,1/6W
RS706	VRD-MN2BD102J	J	AA	1 kohm,1/8W
RS707	VRD-ST2CD102J	J	AA	1 kohm,1/6W
RS711	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
RS712	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W

OTHER CIRCUITRY PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
BI1B	QCNWN1473AWZZ	J	AF	Connector Ass'y,2Pin
BI11/CNS11	QCNWN1487AWZZ	J	AF	Connector Ass'y,6/6Pin
BI12/CNS12	QCNWN1381AWZZ	J	AL	Connector Ass'y,15/15Pin
BI99/CNS99	QCNWN1486AWZZ	J	AG	Connector Ass'y,3/3Pin
BI702/CNSM1	QCNWN1386AWZZ	J	AG	Connector Ass'y,8/12Pin
BI704/CNS704	QCNWN1426AWZZ	J	AF	Connector Ass'y,6/6Pin
BI801/CNS801	QCNWN1428AWZZ	J	AE	Connector Ass'y,3/3Pin
BI802/CNS802	QCNWN1429AWZZ	J	AG	Connector Ass'y,8/8Pin
BIM5/CNS10/CNS5	QCNWN1184AWZZ	J	AL	Connector Ass'y,6/10/2Pin
CNP1	92LCONE5P53253	J	AB	Plug,5Pin
CNP2	QCNCM705HAFZZ	J	AB	Plug,8Pin
CNP3	92LCONE6P53253	J	AC	Plug,6Pin
CNP3A	92LCONE6P53254	J	AC	Plug,6Pin
CNP10	QCNCM705KAWZZ	J	AC	Plug,10Pin
CNP11	QCNCM704FAWZZ	J	AC	Plug,6Pin
CNP12	QCNCM704QAWZZ	J	AG	Plug,15Pin
CNP99/BI1A	QCNCM704CAWZZ	J	AC	Plug,3/2Pin

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
CNP101	92LCONE3P53253	J	AB	Plug,3Pin
CNP102	92LCONE7P53253	J	AC	Plug,7Pin
CNP301	92LCONE-3P5268	J	AC	Plug,3Pin
CNP701	QCNCWZG24AWZZ	J	AE	Socket,24Pin
CNP704	QCNCM705FAFZZ	J	AB	Plug,6Pin
CNP801	QCNCM035CAWZZ	J	AB	Plug,3Pin
CNP802	QCNCM035HAWZZ	J	AB	Plug,8Pin
CNP901	QCNCM010NAWZZ	J	AC	Plug,13Pin
CNP903	92LCONE2P53253	J	AB	Plug,2Pin
CNPM1	QCNCM932MAFZZ	J	AE	Plug,12Pin
CNPM2	QCNCM030BAWZZ	J	AB	Pin Header,2Pin
CNS1A/B	QCNWN1181AWZZ	J	AK	Connector Ass'y,5/5Pin
CNS2A/B	QCNWN1182AWZZ	J	AH	Connector Ass'y,8/8Pin
CNS3A/B	QCNWN1183AWZZ	J	AG	Connector Ass'y,6/6Pin
CNS101	QCNWN1187AWZZ	J	AG	Socket,3Pin
CNS102	QCNWN1188AWZZ	J	AM	Socket,7Pin
CNS701	QCNCWZF24AWZZ	J	AE	Socket,24Pin
CNS901	QCNCW010NAWZZ	J	AC	Socket,13Pin
CNS903	QCNWN1452AWZZ	J	AC	Socket,2Pin
⚠ F801	QFS-D502CSJNI	J	AC	Fuse,5A/125V
⚠ F804,805	QFS-D502CSJNI	J	AC	Fuse,5A/125V
⚠ F806	QFS-D202DSJNI	J	AD	Fuse,2A/250V
FFC701	QCNWN1453AWZZ	J		Flat Cable,24Pin
FL701	VVKBJ685GNK-1	J	AV	FL Display
FW703	QCNWN1427AWZZ	J	AD	Flat Wire,6Pin
FWM1	QCNWN1274AWZZ	J	AC	Flat Cable,2Pin
FWM2	QCNWN0338AWZZ	J	AD	Flat Cable,2Pin
IC99	VHPGP1F32T/-1	J	AP	Optical Fiber Data Link, GP1F32T
JK601	QSOCJ0213AWZZ	J	AE	Jack,Video/AUX
JK671	QJAKM0008AWZZ	J	AF	Jack,Headphones
JOG701	QSW-Z0007AWZZ	J		Switch,Push Type [Volume Jog]
LUG901	QLUGP0001AWZZ	J	AC	Lug Terminal
M1	92LMTR1858CASY	J	AS	Motor with Chassis [Spindle]
M2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]
M3	92LMTR3022AS1	J	AU	Motor with Worm Pulley [T/T Up/Down Loading]
M901	92LMTR1810A	J	AK	Motor,Air Cooling Fan
MM1(260-7)	RMOTV0006AWM1	J	AR	Motor with Pulley [Tape]
PHM1	VHPI31535CD-1	J	AG	Photo Interrupter
PIN103	QLUGP0002AWZZ	J	AB	Lug Pin
RL801	RRLYD0012AWZZ	J	AM	Relay
RL901	RRLYD0004AWZZ	J	AP	Relay
RX701	VHLN63H380A-1	J	AK	Remote Sensor,N63H380A
SO901	QTANA0401AWZZ	J	AG	Terminal,Speaker
SOLM1(260-8)	RPLU-0002AWZZ	J	AH	Solenoid Ass'y [Tape]
SOLM2	RPLU-0002AWZZ	J	AH	Solenoid Ass'y [CD]
SW1	QSW-P0004AWZZ	J	AE	Switch,Push Type [Open/Close]
SW2	QSW-F0001AWZZ	J	AD	Switch,Leaf/Skeleton Type [Mecha Up]
SW3	QSW-P0005AWZZ	J	AD	Switch,Push Type [Disc Number]
SW4	QSW-F9001AW01	J	AD	Switch,Leaf Type [Pickup In]
SW701	92LSWICH1401AT	J	AC	Switch,Key Type [POWER]
SW703	92LSWICH1401AT	J	AC	Switch,Key Type [CLOCK]
SW704	92LSWICH1401AT	J	AC	Switch,Key Type [TIMER/SLEEP]
SW705	92LSWICH1401AT	J	AC	Switch,Key Type [DISC 1]
SW706	92LSWICH1401AT	J	AC	Switch,Key Type [DISC 2]
SW707	92LSWICH1401AT	J	AC	Switch,Key Type [DISC 3]
SW708	92LSWICH1401AT	J	AC	Switch,Key Type [DISC SKIP]
SW709	92LSWICH1401AT	J	AC	Switch,Key Type [OPEN/CLOSE]
SW710	92LSWICH1401AT	J	AC	Switch,Key Type [REW]
SW711	92LSWICH1401AT	J	AC	Switch,Key Type [REC PAUSE]
SW712	92LSWICH1401AT	J	AC	Switch,Key Type [MEMORY/SET]
SW713	92LSWICH1401AT	J	AC	Switch,Key Type [STOP]
SW714	92LSWICH1401AT	J	AC	Switch,Key Type [TUNER (BAND)]
SW715	92LSWICH1401AT	J	AC	Switch,Key Type [VIDEO/AUX]
SW716	92LSWICH1401AT	J	AC	Switch,Key Type [TAPE]
SW717	92LSWICH1401AT	J	AC	Switch,Key Type [CD]
SW722	92LSWICH1401AT	J	AC	Switch,Key Type [FF]
SW723	92LSWICH1401AT	J	AC	Switch,Key Type [TUNING UP]
SW724	92LSWICH1401AT	J	AC	Switch,Key Type [TUNING DOWN]
SW725	92LSWICH1401AT	J	AC	Switch,Key Type [PLAY]
SW728	92LSWICH1401AT	J	AC	Switch,Key Type [X-BASS/DEMO]
SW729	92LSWICH1401AT	J	AC	Switch,Key Type [EQUALIZER]
SW730	92LSWICH1401AT	J	AC	Switch,Key Type [DIMMER]
SWM3(260-9)	92LM-SW1676A	J	AC	Switch,Leaf Type [Fool Proof]
SWM4(260-10)	QSW-F9003AWZZ	J	AG	Switch,Leaf Type [F.A.S.]
SWM5(260-11)	92LM-SW1658A	J	AB	Switch,Leaf Type [CAM]

CD MECHANISM PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
301	NGERH0011AWZZ	J	AC	Gear,Middle
302	NGERH0012AWZZ	J	AC	Gear,Drive
303	MLEVP0010AWZZ	J	AC	Rail,Guide
304	NSFTM0002AWFW	J	AE	Shaft,Guide
305	92LM-CUSN1524A	J	AC	Cushion
⚠ 306	92LHPC1MASY	J	BG	Pickup Unit Ass'y
306- 1	————		—	Pickup Unit (Not Replacement Item)
306- 2	NGERR0043AFZZ	J	AC	Gear,Rack
306- 3	MSPRC0961AFZZ	J	AA	Spring,Rack
701	XBSSD26P06000	J	AA	Screw,ø2.6×6mm
702	XHBSD20P05000	J	AA	Screw,ø2×5mm
703	XBBSD20P03000	J	AA	Screw,ø2×3mm
704	LX-WZ1070AFZZ	J	AA	Washer,ø1.5×ø3.8×0.25mm
M1	92LMTR1858CASY	J	AS	Motor with Chassis [Spindle]
M2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]
SW4	QSW-F9001AW01	J	AD	Switch,Leaf Type [Pickup In]

CABINET PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
201	GCAB-1044AWSA	J	AM	CD Player Base
202	92LCAB3081AS1	J	BB	Front Panel Ass'y
202- 1	————		—	Front Panel (Not Replacement Item)
202- 2	JKNBZ0557AWSA	J	AE	Button,Disc No.
202- 3	JKNBZ0558AWSA	J	AE	Button,Open/Close/Disc Skip
202- 4	JKNBZ0559AWSA	J	AE	Button,Power
202- 5	JKNBZ0560AWSA	J	AE	Button,X-BASS/Demo
202- 6	JKNBZ0563AWSA	J	AG	Button,FF/REW/Tuning
202- 7	JKNBZ0622AWSA	J	AD	Button,Timer/Sleep/Clock
202- 8	JKNBZ0621AWSA	J	AD	Button,Dimmer/Equalizer
202-10	KNOB3051AASY1	J	AK	Button,Function
202-11	HDECQ0412AWSA	J	AC	Operation Ring A
202-12	HDECQ0413AWSA	J	AF	Operation Ring B
202-13	HDECQ0414AWSA	J	AD	Cap,Operation Center
202-14	HDECQ0415AWSA	J	AD	Cover,LED
202-15	HDECQ0417AWSA	J	AE	Panel,Center Cap
202-16	HDECQ0418AWSC	J	AH	Panel,Decoration
202-17	HDECQ0419AWSA	J	AF	Decoration,Play Button
202-18	HDECQ0420AWSA	J	AE	Decoration,Stop Button
202-19	HDECQ0467AWSA	J	AH	Panel,AMP.
202-20	HDECQ0457AWSA	J	AC	Panel,Play Decoration
202-21	HDECQ0458AWSA	J	AC	Panel,Stop Decoration
202-22	PSHEP0031AWZZ	J	AC	Sheet,Reflector
203	92LMEC3051CTS1	J	AN	Cassette,Holder Ass'y,Tape 1
203- 1	————		—	Cassette Holder,Tape 1 (Not Replacement Item)
203- 2	GCOVA1221AWSB	J	AH	Cassette Cover,Tape 1
203- 3	HDECQ0408AWSA	J	AD	Panel,Cassette,Tape 1
204	92LMEC3051CTS2	J	AN	Cassette,Holder Ass'y,Tape 2
204- 1	————		—	Cassette Holder,Tape 2 (Not Replacement Item)
204- 2	GCOVA1222AWSB	J	AH	Cassette Cover,Tape 2
204- 3	HDECQ0409AWSA	J	AD	Panel,Cassette,Tape 2
205	92LKNOB3081BS1	J		Button,Volume Ass'y
205- 1	————		—	Button,Volume (Not Replacement Item)
205- 2	92LCSPR1431C	J	AA	Spring,Ring
205- 3	GCOVA1233AWZZ	J		Refelector B
206	MSPRD0092AWFJ	J	AB	Spring,Cassette,Tape 1
207	MSPRD0093AWFJ	J	AB	Spring,Cassette,Tape 2
208	92LHOLD3022AS1	J	AB	Stabilizer Ass'y
208- 1	————		—	Stabilizer (Not Replacement Item)
208- 2	PMAGF0001AWZZ	J	AF	Magnet,Stabilizer
208- 3	92LSUPT1749D	J	AA	Support,Stabilizer Magnet
209	MLEVP0067AWZZ	J	AC	Lever,Lock
210	LCHSZ0011AWZZ	J	AG	Chassis,CD Mechanism
211	LHLDZ1141AWZZ	J	AB	Support,Pitch
212	MLEVP0066AWZZ	J	AE	Lever,Shift
213	MLEVP0068AWZZ	J	AB	Lever,Change
214	MSPRC0024AWFW	J	AB	Spring,Solenoid
215	NBLTK0033AWZZ	J	AC	Belt,Drive
216	NGERH0064AWZZ	J	AD	Gear,Cam
217	NGERH0065AWZZ	J	AB	Gear,Turntable
218	NGERK0003AWZZ	J	AC	Gear,Drive

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
219	NGERK0004AWZZ	J	AB	Gear,Bevel
220	NGERK0005AWZZ	J	AB	Gear,Loading
221	NGERW0006AWZZ	J	AC	Gear,Worm Wheel
222	NPLYD0002AWZZ	J	AC	Pulley
223	LANGF0032AWZZ	J	AC	Support,T/T Lock Lever
224	LCHSZ0010AWZZ	J	AM	Chassis,Loading
225	LHLDZ1140AWZZ	J	AB	Guide
226	MLEVP0070AWZZ	J	AB	Lever,T/T Lock
227	MSPRC0020AWFJ	J	AB	Spring,T/T Lock Lever
228	MSPRD0044AWFJ	J	AB	Spring,Lock Lever
229	NROLP0009AWZZ	J	AB	Roller
230	NTNT-0018AWSA	J	AK	Turntable
231	PCOVZ1013AWZZ	J	AB	Cover,Wire
232	PCUSG0022AWZZ	J	AB	Cushion,Leg
233	92LCOV3022AS1	J	AM	CD Tray Cover Ass'y
233- 1	————		—	Cover,CD Tray (Not Replacement Item)
233- 2	92LBADGE1671A	J	AC	Badge,SHARP
233- 3	GCOVA1224AWSA	J	AE	Cover,CD Tray Panel,Left
233- 4	GCOVA1225AWSA	J	AE	Cover,CD Tray Panel,Right
234	GCAB-1052AWSA	J	AP	Top Cabinet
235	GCOVA1232AWZZ	J	AC	Cover,Volume Refector A
236	92LN-BAND1318A	J	AA	Nylon Band,80mm
239	PCUSG0022AWZZ	J	AB	Cushion,Leg
240	92LCAB3081BS1	J		Side Panel Ass'y,Left
240- 1	————		—	Side Panel,Left (Not Replacement Item)
240- 2	PCUSG0022AWZZ	J	AB	Cushion,Leg
241	92LCAB3081CS1	J		Side Panel Ass'y,Right
241- 1	————		—	Side Panel,Right (Not Replacement Item)
241- 2	PCUSG0022AWZZ	J	AB	Cushion,Leg
242	LANGK0059AWFW	J	AD	Bracket,Motor Fan Support
243	LBSHC0005AWZZ	J	AD	Bushing,AC Power Supply Cord
245	LCHSM0088AWFW	J	AR	Main Chassis
246	NFANP0001AWZZ	J	AD	Rotary Fan
247	GITAR0462AWSA	J	AN	Rear Panel [For U.S.A.]
247	GITAR0466AWSA	J		Rear Panel [Except for U.S.A.]
⚠ 248	QFSHD0001AWZZ	J	AB	Holder,Fuse
⚠ 249	QACCD0022AWZZ	J	AM	AC Power Supply Cord
250	PRDAR0095AWFW	J	BB	Heat Sink,Main
252	PRDAR0140AWFW	J	AG	Heat Sink,Sub
253	92LCSPR1431C	J	AA	Spring,Ring
254	LHLDZ1226AWZZ	J	AC	Holder,Multi Indicator
255	LHLDZ1227AWZZ	J	AC	Holder,Volume
256	LHLDZ1228AWZZ	J	AC	Holder,Play,Stop
257	LHLDZ1229AWZZ	J	AC	Holder,Function
258	LHLDZ1213AWZZ	J	AE	Holder,FL
259	LHLDZ1204AWSA	J	AD	Bracket,Stabilizer
260	92LMEC2744AS1	J	BK	Tape Mechanism Ass'y
260- 1	NBLTK0011AWZZ	J	AC	Belt,Main
260- 2	NBLTK0012AWZZ	J	AB	Belt,Main
260- 3	NBLTK0030AWZZ	J	AC	Belt,Sub
260- 4	NROLY0002AWZZ	J	AF	Pinch Roller Ass'y
260- 5	RHEDA0001AWZZ	J	AG	Head,Erase
260- 6	92LMRPH1746A	J	AM	Head,Record/Playback
260- 7(MM1)	RMOTV0006AWM1	J	AR	Motor with Pulley [Tape]
260- 8(SOLM1)	RPLU-0002AWZZ	J	AH	Solenoid Ass'y [Tape]
260- 9(SWM3)	92LM-SW1676A	J	AC	Switch,Leaf Type [Fool Proof]
260-10(SWM4)	QSW-F9003AWZZ	J	AG	Switch,Leaf Type [F.A.S.]
260-11(SWM5)	92LM-SW1658A	J	AB	Switch,Leaf Type [CAM]
262	MLIFP0006AWZZ	J	AE	Damper,Cassette Holder
263	LANGK0057AWFW	J	AE	Bracket,Heat Sink,A
264	LANGK0058AWFW	J	AE	Bracket,Heat Sink,B
266	LHLDF1001AWZZ	J	AC	Holder,PWB
267	QCNWN1481AWZZ	J		Lug Wire
601	XJBSF30P10000	J	AA	Screw,ø3×10mm
603	XJBSD30P08000	J	AA	Screw,ø3×8mm
604	XJBSD30P10000	J	AA	Screw,ø3×10mm
605	LX-HZ0082AFZZ	J	AA	Screw,ø4×8mm
606	LX-JZ0010AFFD	J	AA	Screw,ø3×10mm
607	XBBSD20P04000	J	AA	Screw,ø2×4mm
608	XJBSF30P10000	J	AA	Screw,ø3×10mm
610	XESSD30P10000	J	AA	Screw,ø3×10mm
611	XJSSF30P10000	J	AA	Screw,ø3×10mm
612	XWHJZ62-09510	J	AB	Washer,ø6.2×ø10×0.9mm
613	XEBSD30P10000	J	AA	Screw,ø3×10mm
614	LX-JZ0002AWFD	J	AA	Screw,ø3×10mm
615	LX-EZ0005AWFD	J	AA	Screw,Special
616	XEBSD30P12000	J	AA	Screw,ø3×12mm
617	XBPSD26P05JSO	J	AB	Screw,ø2.6×5mm
618	LX-TZ0019AFZZ	J	AB	Screw,Special
619	XEBSD26P12000	J	AA	Screw,ø2.6×12mm
621	XHBSD30P06000	J	AA	Screw,ø3×6mm
622	XJBSF30P06000	J	AA	Screw,ø3×6mm
623	XEBSF30P10000	J	AA	Screw,ø3×10mm
624	XJSSD30P10000	J	AA	Screw,ø3×10mm
625	XJBSD30P16000	J	AA	Screw,ø3×16mm

ACCESSORIES

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
	QANTL0007AWZZ	J	AK	AM/FM Loop Antenna
	TCAUS0042AWZZ	J		Caution,Energy Star
	TINSE0249AWZZ	J	AE	Operation Manual [For U.S.A.]
	TINSZ0419AWZZ	J		Operation Manual [Except for U.S.A.]
	TINSZ0420AWZZ	J	AB	Quick Guide [For U.S.A. Only]
	TLABZ0558AWZZ	J	AB	Label,Feature,Tape 1
	TLABZ0559AWZZ	J	AB	Label,Feature,Tape 2
	TLABZ0560AWZZ	J		Label,Feature,Amp.
	RRMCG0177AWSA	J	AS	Remote Control
	GFTAB1022AWSA	J		Battery Lid,Remote Control
	92L291-0084	J		Speaker Cord Ass'y

P.W.B. ASSEMBLY (Not Replacement Item)

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
PWB-A1~4	92LPWB3081MANS	J	—	Main/Display/Switch/Digital Output (Combined Ass'y)
PWB-B1,2	92LPWB3081PWRS	J	—	Power Supply/Power Amp. (Combined Ass'y)
PWB-C	92LPWB3022CDUS	J	—	CD Servo
PWB-D	QPWBF0027AWZZ	J	AD	CD Motor (PWB Only)
PWB-E	QPWBF0341AWZZ	J	AB	Sensor (PWB Only)
PWB-F	QPWBF0106AWZZ	J	AF	Tape Mechanism (PWB Only)

OTHER SERVICE PART

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
	UDSKA0004AFZZ	J	AZ	CD Pickup Lens Cleaner

CP-C662

SPEAKER BOX PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
901	92L051-0075	J		Cabinet Ass'y
902	92L312-0077	J		Front Panel
903	92L302-0016	J		Support,Woofer
904	92L121-0173	J		Net Frame Ass'y
905	92L122-0047	J		Speaker Cord Ass'y with Capacitors
907	92L372-0109	J		Screw,ø3×10mm
908	92L372-0064	J	AB	Screw,ø4×16mm
909	92L372-0100	J	AC	Screw,ø4×16mm
910	92L316-0072	J		Paper Pipe
911	92L319-0027	J	AE	Catching Holder
912	92L391-0056	J		Felt
913	92L351-0333	J		Label,Specification
914	92L394-0053	J		Cushion
SP1,2	VSP0020WBA56A	J		Woofer
SP3,4	VSP0080TBP36A	J		Tweeter

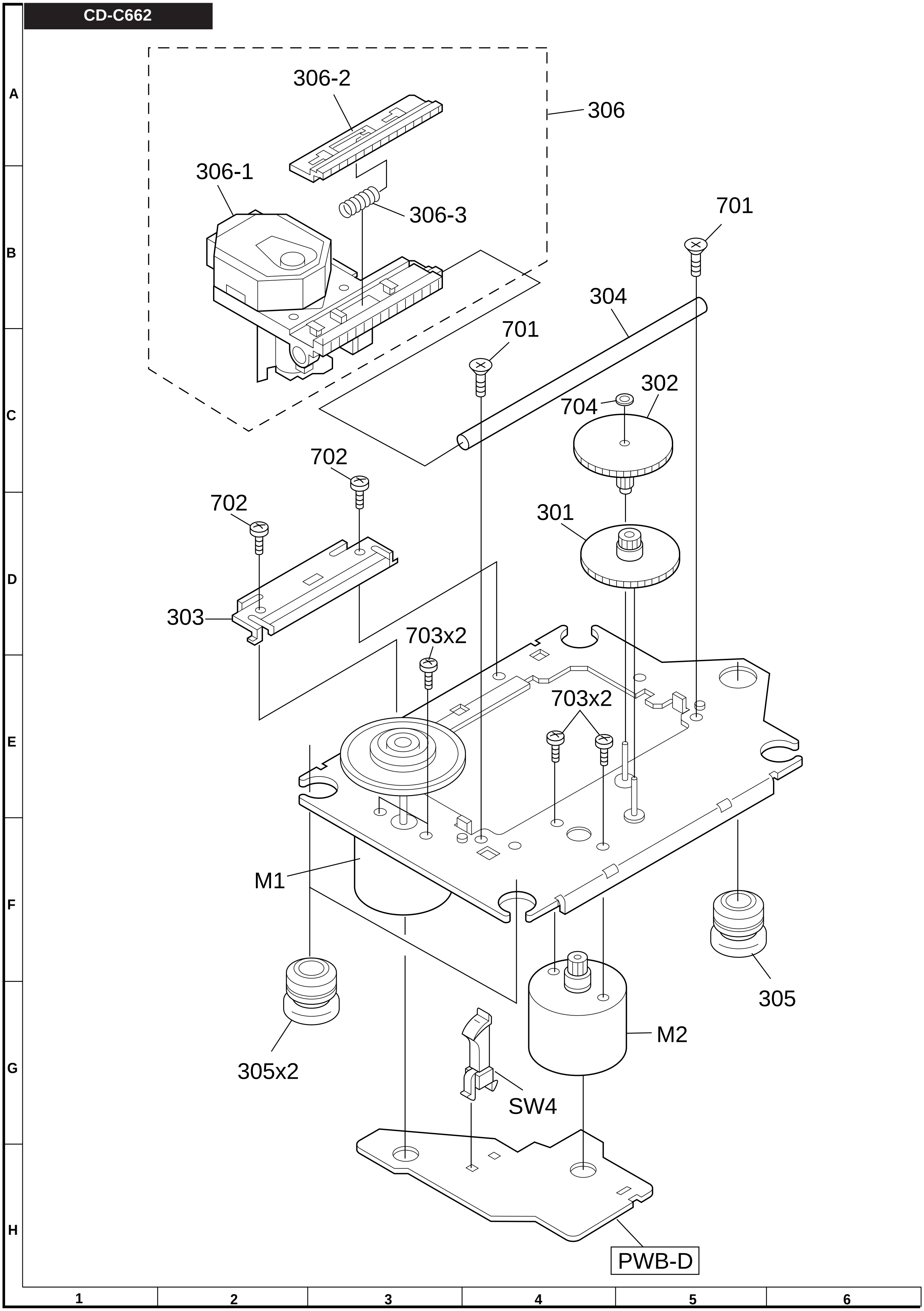


Figure 7 CD MECHANISM EXPLODED VIEW

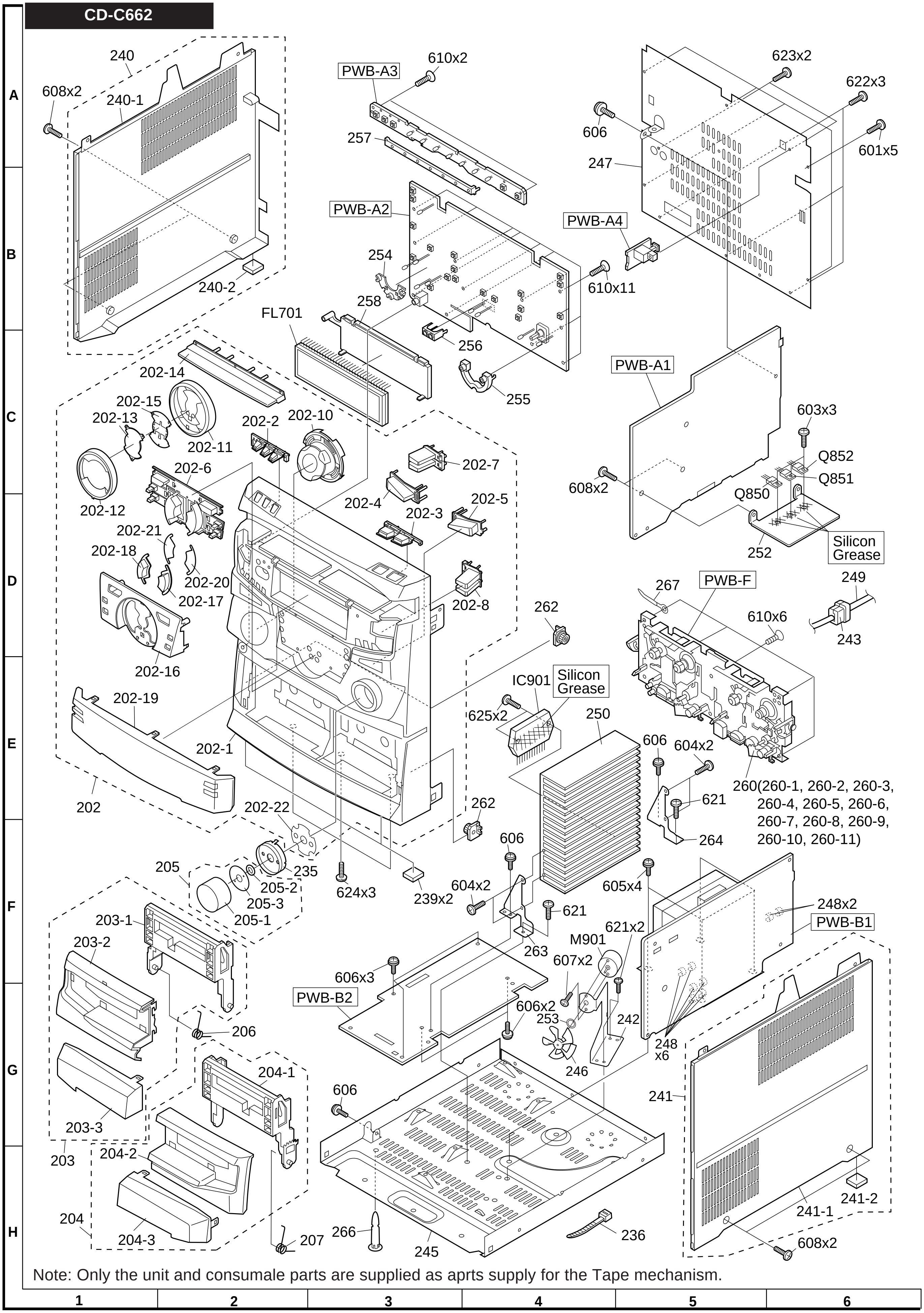


Figure 8 CABINET EXPLODED VIEW (1/2)

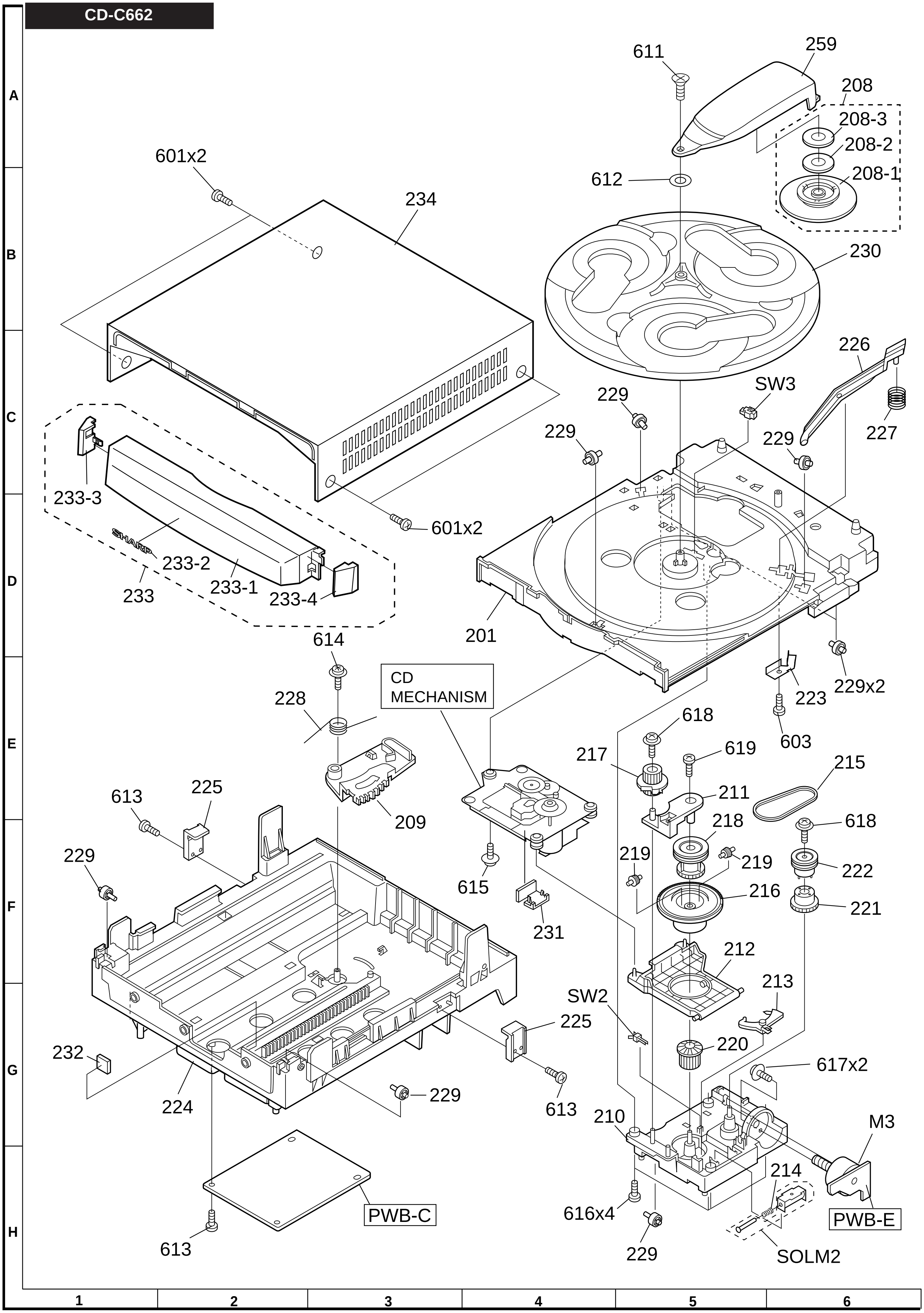


Figure 9 CABINET EXPLODED VIEW (2/2)

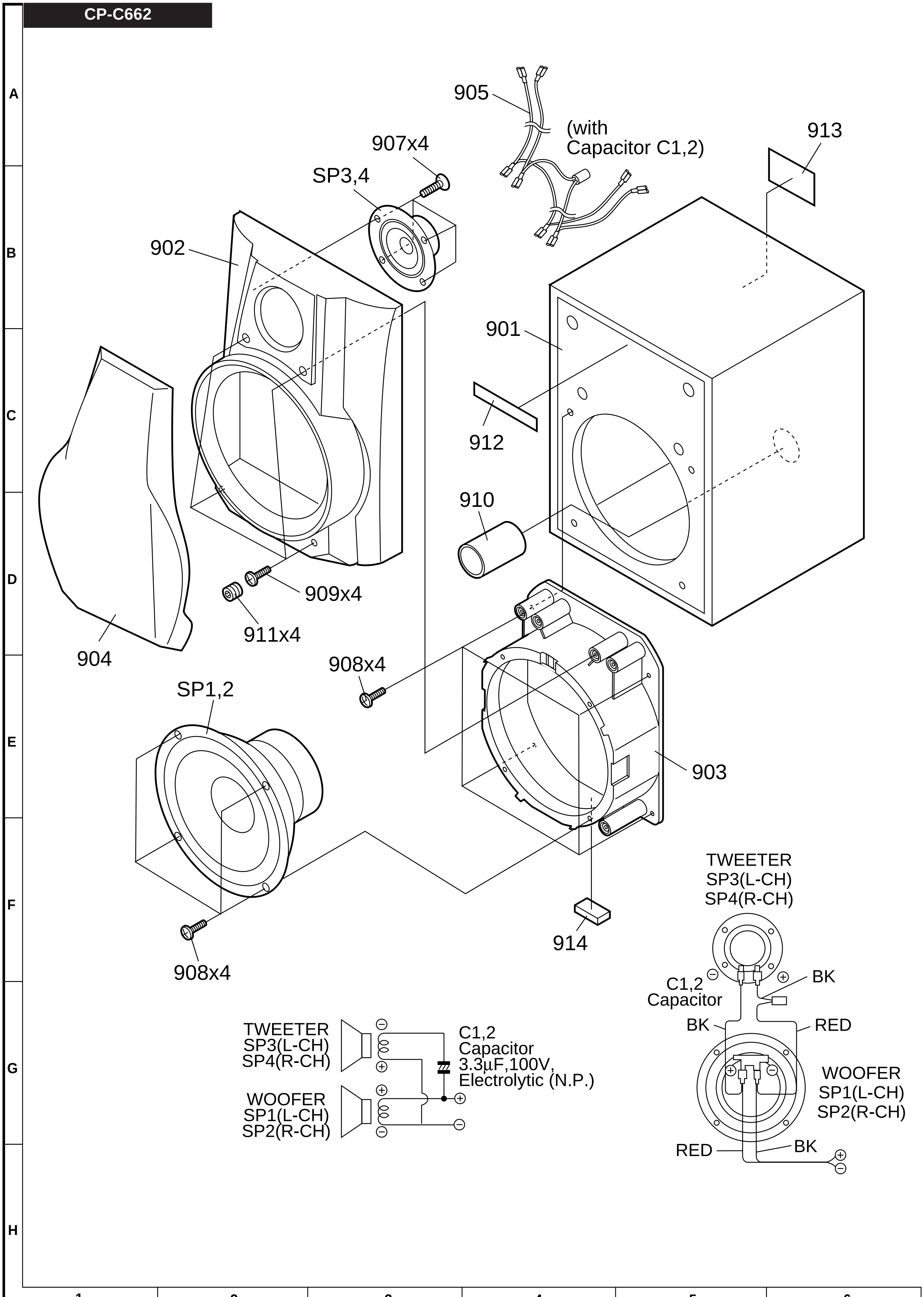
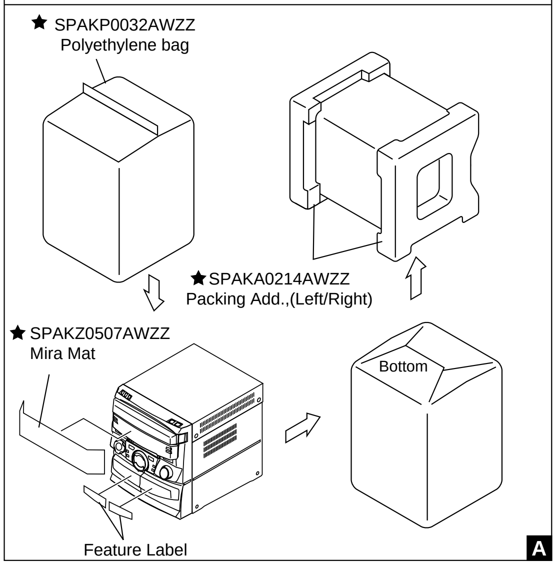


Figure 10 SPEAKER EXPLODED VIEW

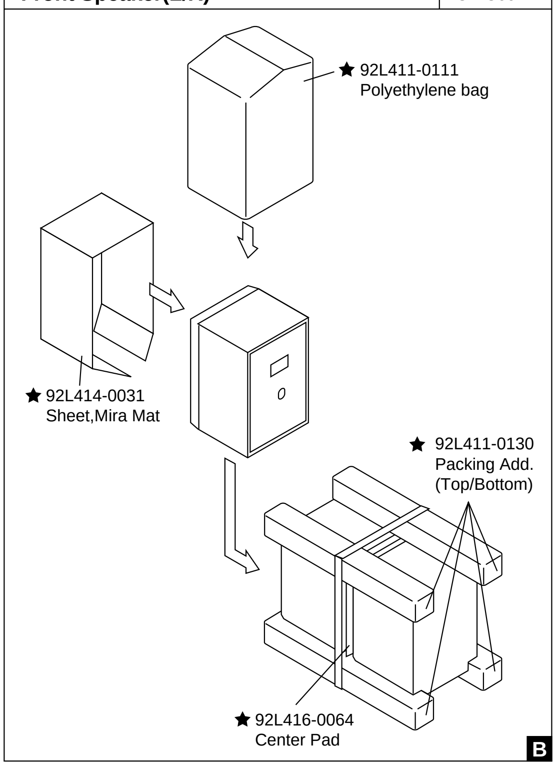
PACKING OFF THE SET (FOR U.S.A. ONLY)

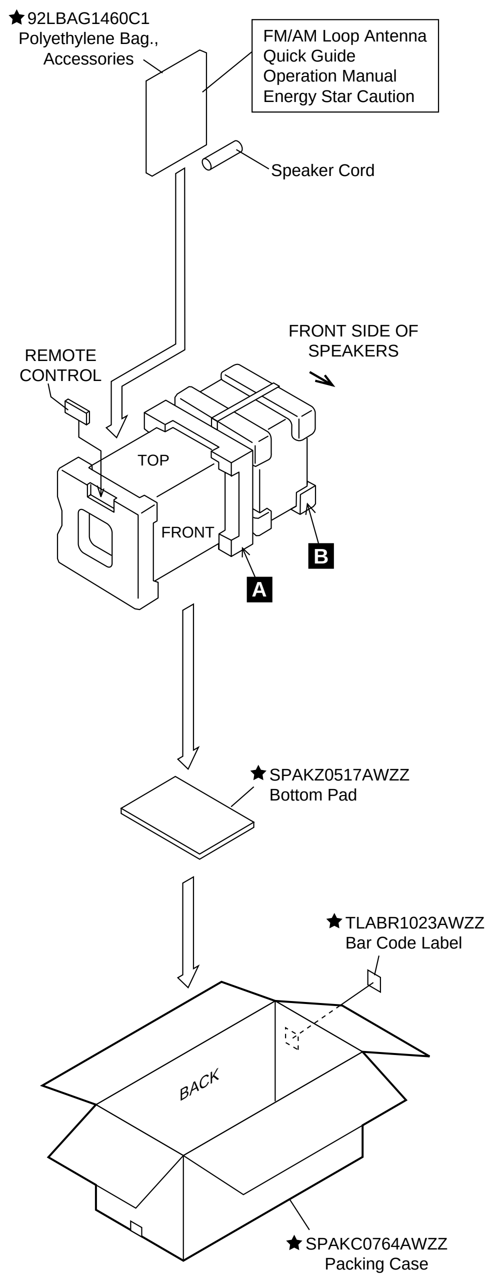
Setting position of switches and knobs	
Tape Mechanism	STOP

UNIT



Front Speaker(L/R) CP-C662





★Not Replacement Item

SHARP

SHARP CORPORATION
Communication Systems Group
Quality & Reliability Control Center
Higashihiroshima, Hiroshima 739-0192, Japan
Printed in Japan

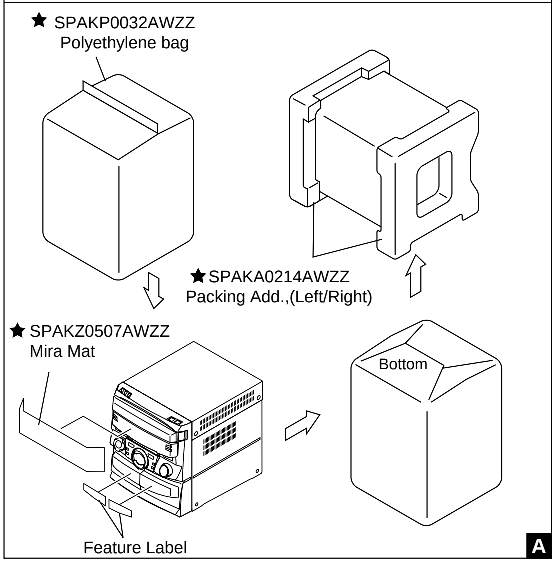
A9904-2627NS•HA•M

SC • LAG

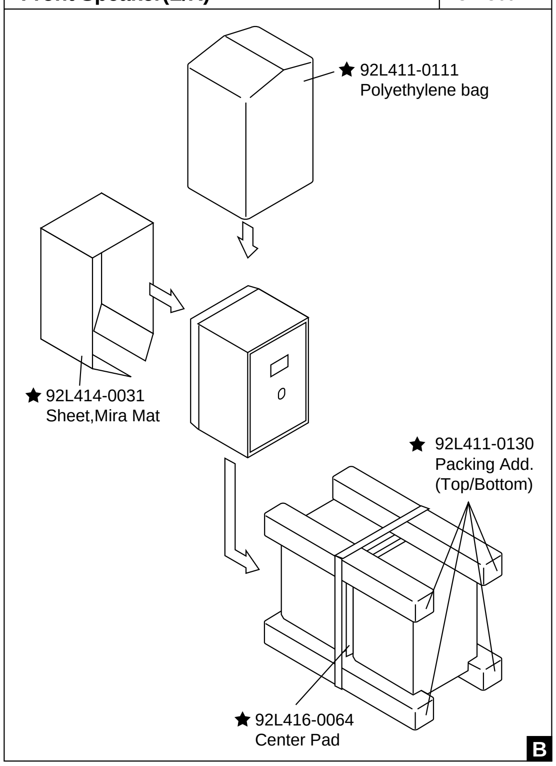
PACKING OFF THE SET (FOR U.S.A. ONLY)

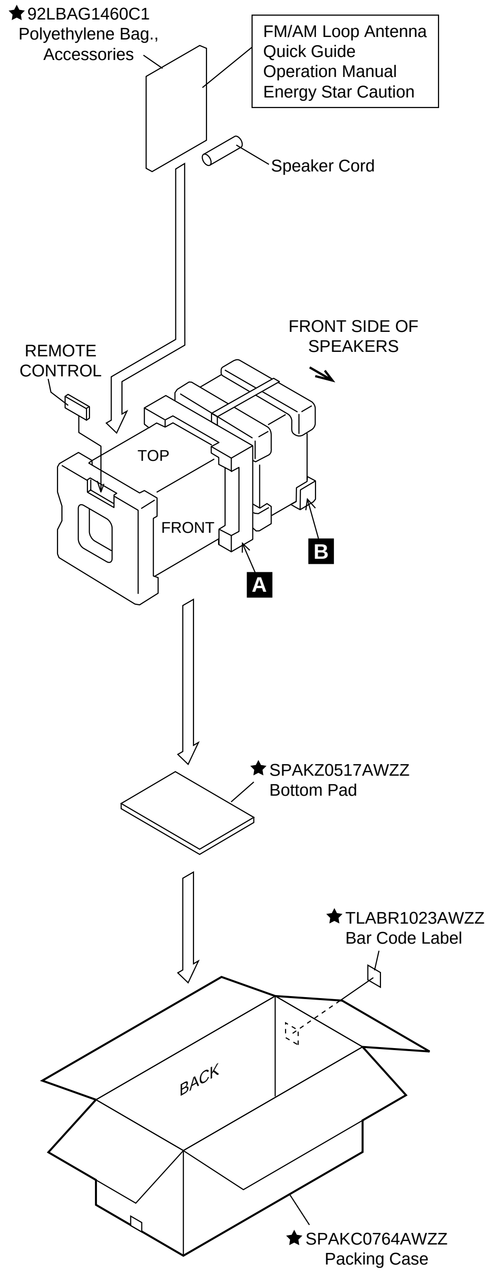
Setting position of switches and knobs	
Tape Mechanism	STOP

UNIT



Front Speaker(L/R) | **CP-C662**





★Not Replacement Item

SHARP CORPORATION
Communication Systems Group
Quality & Reliability Control Center
Higashihiroshima, Hiroshima 739-0192, Japan
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